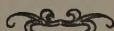


The North Central Association Quarterly



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Jones, Judd, Miller, Phillips, Reed, Schmidt, Smyser, and Stout are found in both lists. The others are, for the most part, different.

This of course does not mean that several other individuals have not been regularly in attendance at the annual meetings. It denotes, though, that the leadership in the Association is shifting constantly.

DEAN EDMONSON

Members of the North Central Association will be pleased to know that at a meeting of the Board of Regents of the University of Michigan, held January 21, our genial secretary, J. B. Edmonson, was made dean of the School of Education. Hail and congratulations!

THE REVISED CONSTITUTION

For the sake of reference, the new constitution adopted March 15, 1928, is re-printed in this issue. It will be recalled by those present last year that quite a parliamentary tangle resulted at the time the proposed constitution was up for consideration. There are those who felt that the Association either did not know its own mind or else was very obscure in expressing it.

EDITORIAL BOARD MEETING

Notice is herewith given that there will be an important meeting of the Quarterly Editorial Board on Tuesday, March 12, at four o'clock sharp. It is highly important that all members of the Board shall be present.

A NEW ASSOCIATION

It looks now as if a new association of colleges and secondary schools is about to be formed. This will, according to pro-

posals, be called the Western Association. For the present it is likely to embrace the schools and colleges of California only, but may extend its range to include other neighboring states as well. A committee appointed by State Superintendent Cooper is working out details, with the expectation of making recommendations at the time of the next California High School Principals' Association in March.

"DEBUNKING" THE MASTER'S DEGREE

On the special request of the Committee on the Professional Training of High School Teachers and by consent of Dean Slichter, we are reprinting in this issue Dean Slichter's article entitled, "*Debunking*" the Master's Degree. This address was first published in the Proceedings and Addresses of the Association of American Universities.

THE NATIONAL SURVEY OF SECONDARY EDUCATION

Professor Judd, Chairman of the North Central Association's Committee on Federal Aid for a school survey, submits the following statements:

The House of Representatives and the Senate have both acted favorably on the appropriation which the North Central Association asked Congress to make for a study of secondary schools and their relations to colleges. The appropriation for the first year is \$50,000. The appropriations for the second and third years will be \$100,000 and \$75,000, making an aggregate of \$225,000. The form of the action is as follows:

"For all expenses, including personal services in the District of Columbia and elsewhere, purchase and rental of equip-

ment, purchase of supplies, traveling expenses, printing, and all other incidental expenses not included in the foregoing, to enable the Secretary of the Interior, through the Bureau of Education, at a total cost of not to exceed \$225,000, to make a study of the organization, administration, financing, and work of secondary schools and of their articulation with elementary and higher education, \$50,000: *Provided*, That specialists and experts for temporary service in this investigation may be employed at rates to be fixed by the Secretary of the Interior to correspond to those established by the Classification Act of 1923, as amended, and without reference to the Civil Service Act of January 16, 1883."

The North Central Association secured the cordial co-operation of the other regional associations, of the American Council on Education, and of the National Education Association in support of its request. The favorable action of Congress is due in very large measure to the Secretary of the Interior, the Hon. Roy O. West, Ex-Commissioner John J. Tigert, Representative Louis C. Cramton of the House Committee on Appropriations, and General H. M. Lord, Director of the Budget.

AN OPEN LETTER

Secretary Edmonson submits the following as an open letter to High School Principals:

Your attention is called to the following requirements of the North Central Association of Colleges and Secondary Schools:

Standard 7—*Preparation of Teachers*.
All schools accredited by the Associa-

tion shall maintain the following standards respecting teachers:

(a) The minimum attainments of a teacher of any academic subject, and of the supervisors of teachers of such subjects, shall be equivalent to graduation from a college belonging to the North Central Association of Colleges and Secondary Schools. Such requirements shall not be construed as retroactive.

In view of the foregoing regulation, employing authorities are urged to consult the list of approved colleges as given in the issue of June, 1928, of the North Central Association Quarterly. When in doubt as to the standing of any college not on the list, employing authorities are urged to refuse contracts until the chairman of the state committee declares that the college in question has a standing "equivalent" to a North Central school.

(b) The minimum professional training of a teacher of any academic subject, and the supervisors of teachers of such subjects, shall be fifteen semester hours in education. This requirement shall not be construed as retroactive.

In order to protect your school against a violation of this standard, you are urged to require teachers to submit evidence in writing that the requirement of fifteen hours in education is fully satisfied. It is the general policy of the Association to refuse to count as education any courses that are not listed as educational courses in the school or college from which the teacher received a degree. For further information concerning the interpretation of this standard, please address the chairman of your state committee.

This communication is issued at this time in order to decrease the number of violations that occur of the standards of the association.

Nominations for 1929-1930

The Nominating Committee, appointed by President W. I. Early, submits the following report.

REPORT OF NOMINATIONS FOR 1929-30

President: W. P. Morgan, Western State Teachers College, Macomb, Illinois

1st Vice-President: H. G. Hotz, University of Arkansas, Fayetteville, Arkansas

2nd Vice-President: E. W. Montgomery, Union High School, Phoenix, Arizona.

Members of the Executive Committee:

1. Merle Prunty, High School, Tulsa, Oklahoma
2. Thomas W. Gosling, Public Schools, Akron, Ohio

Respectfully submitted,

MILO H. STUART, Chairman
Principal, Technical High School
Indianapolis, Indiana

JOHN P. EVERETT
Professor, Western State Teachers College
Kalamazoo, Michigan

LYMAN FORT
Principal, Mitchell High School
Mitchell, South Dakota

A. A. REED
Professor, University of Nebraska
Lincoln, Nebraska

J. L. SCHOUSE
Dean, Marshall College
Huntington, West Virginia

The Official Roster of the Association

Article IV of the Constitution of the Association provides:

"The officers of the Association shall be a President, two Vice-Presidents, a Secretary, and a Treasurer. . . .

"There shall be an Executive Committee, a Commission on Institutions of Higher Education, a Commission on Secondary Schools, a Commission on Unit Courses and Curricula, constituted as hereinafter defined."

The membership of these several committees, together with their officers, is given below.

OFFICERS OF THE ASSOCIATION 1928-1929

- W. I. Early, President, Washington High School, Sioux Falls, South Dakota.
 W. E. Smyser, 1st Vice-Pres., Ohio Wesleyan University, Delaware, Ohio.
 L. W. Webb, 2nd Vice-Pres., Northwestern University, Evanston, Illinois.
 J. B. Edmonson, Secretary, University of Michigan, Ann Arbor, Michigan.
 E. H. K. McComb, Treasurer, Emmerich Manual Training High School, Indianapolis, Indiana.

EXECUTIVE COMMITTEE

1928-1929

- W. W. Boyd, Western College for Women, Oxford, Ohio.
 *Thomas M. Deam, Asst. Supt. of Schools, Joliet, Illinois.
 H. M. Gage, Coe College, Cedar Rapids, Iowa.

¹Supersedes L. W. Smith, now Superintendent of Schools, Berkeley, California.

M. E. Haggerty, University of Minnesota, Minneapolis, Minnesota.

F. C. Landsittel, Ohio State University, Columbus, Ohio.

W. P. Morgan, Western State Teachers College, Macomb, Illinois.

C. H. Perrine, Lake View High School, Chicago, Illinois.

Merle Prunty, Central High School, Tulsa, Oklahoma.

And

The President, the Secretary and the Treasurer, Ex-officio.

COMMISSIONS OF THE ASSOCIATION

A. Commission on Secondary Schools

OFFICERS

Chairman—F. C. Landsittel, Ohio State University, Columbus, Ohio.

Secretary—C. C. Brown, University of Colorado, Boulder, Colorado.

MEMBERS 1928-1929

Arizona

- *University, J. W. Clarson, Jr., Tucson.
 State Department, C. O. Case, Phoenix.
 High School, O. W. Patterson, Tucson.

Arkansas

- University, H. G. Hotz, Fayetteville.
 *State Department, M. R. Owens, Little Rock.
 High School, J. A. Larson, Little Rock.
 Advisory Member, Supt. Ury McKenzie, Hot Springs.

*Names starred are those of the chairmen of the several state committees. All correspondence respecting North Central Association secondary school matters should be addressed to these chairmen.

Colorado

*University, Charles C. Brown, Boulder.
High School, E. L. Brown, Denver.

Illinois

*University, A. W. Clevenger, Urbana.
State Department, J. C. Hanna, Springfield.
High School, C. H. Kingman, Ottawa.

Indiana

*University, Carl G. F. Franzen, Bloomington. *Vice*, Hubert G. Childs, deceased.

State Department, Virgil Stinebaugh, Indianapolis.

High School, E. H. K. McComb, Indianapolis.

Advisory Member, Supt. A. E. Highley, Lafayette.

Iowa

*State Board of Education, W. H. Gemmill, Des Moines.

State Department, Miss Agnes Samuelson, Des Moines.

High School, James Rae, Mason City.

Advisory Member, Supt. Wm. F. Shirley, Marshalltown.

Kansas

University, W. H. Johnson, Lawrence.

*State Department, J. E. Edgerton, Topeka.

High School, Willard N. Van Slyck, Salina.

Advisory Member, Supt. J. F. Hughes, El Dorado.

Michigan

*University, J. B. Edmonson, Ann Arbor.

State Department, C. L. Goodrich, Lansing.

High School, E. L. Miller, Detroit.

Advisory Member, Supt. L. A. Butler, Grand Rapids.

Minnesota

University, C. W. Boardman, Minneapolis.

*State Department, E. M. Phillips, St. Paul.

High School, C. Willard Cross, Fari-bault.

Missouri

*University, J. D. Elliff, Columbia.

State Department, O. G. Sanford, Jefferson City.

High School, H. E. Blaine, Joplin.

Advisory Member, Supt. L. E. Zeigler, Maryville.

Montana

University, Freeman Daughters, Missoula.

*State Department, W. E. Stegner, Helena.

High School, Geo. A. Ketcham, Missoula.

Advisory Member, Supt. I. B. Collins, Roundup.

Nebraska

*University, A. A. Reed, Lincoln.

State Department, G. W. Rosenlof, Lincoln.

High School, L. C. Wicks, Fremont.

Advisory Member, Supt. M. C. Lefler, Lincoln.

New Mexico

University, B. F. Haught, Albuquerque.

*State Department, Clara D. True, Santa Fe.

High School, R. E. Marshall, Clovis.

Advisory Member, Supt. John Milne, Albuquerque.

North Dakota

University, C. C. Schmidt, Grand Forks.

*State Department, John A. Page, Bismarck.

High School, P. H. Lehman, Grand Forks.

Advisory Member, Supt. G. W. Hanna, Valley City.

Ohio

University, F. C. Landsittel, Columbus.

*State Department, T. Howard Winters, Columbus.

High School, E. E. Morley, Cleveland Heights.

Advisory Member, Supt. B. O. Skinner, Marietta.

Oklahoma

University, Roy Gittinger, Norman.

*State Department, Geo. C. Wells, Oklahoma City.

High School, Eli Foster, Bartlesville.

Advisory Member, C. K. Reiff, Muskogee.

South Dakota

*University, H. W. Frankenfeld, Vermillion.

State Department, None

High School, W. I. Early, Sioux Falls.

Advisory Member, Supt. J. C. Lindsey, Mitchell.

West Virginia

*University, J. N. Deahl, Morgantown.

State Department, R. E. Langfitt, Charlestown.

High School, W. E. Buckey, Fairmont.

Advisory Member, Supt. C. L. Wright, Huntington.

Wisconsin

*University, Thomas Lloyd-Jones, Madison.

State Department, J. T. Giles, Madison.

High School, G. J. Balzer, Milwaukee.

Advisory Member, Supt. John F. Wadell, South Milwaukee.

Wyoming

*University, C. R. Maxwell, Laramie.

State Department, Miss Georgine Erlandson, Cheyenne.

High School, J. J. Marshall, Sheridan.

Class of 1929

C. W. Gethmann, Central High School, Oklahoma City, Oklahoma.

L. A. Lowther, Public Schools, Emporia, Kansas.

R. B. Mertz, High School, Trinidad, Colorado.

T. W. Gosling, Superintendent of Schools, Akron, Ohio.

A. M. Hitch, Kemper Military School, Booneville, Missouri.

C. L. Robertson, Public Schools, Jamestown, North Dakota.

Class of 1930

Ira Smith, University of Michigan, Ann Arbor, Michigan.

M. H. Stuart, Technical High School, Indianapolis, Indiana.

L. N. McWhorter, Asst. Superintendent, Minneapolis, Minnesota.

F. D. McElroy, School of Education, Cleveland, Ohio.

W. E. McVey, High School, Harvey, Illinois.

W. C. Reavis, University of Chicago, Chicago, Illinois.

Class of 1931

F. L. Hunt, Culver Military Academy, Culver, Indiana.

O. L. Nixon, East High School, Green Bay, Wisconsin.

H. T. Steeper, West High School, Des Moines, Iowa.

S. H. Lyttle, Eastern High School, Saginaw, Michigan.

A. L. Spohn, High School, Hammond, Indiana.

H. G. Blue, Colorado State Teachers College, Greeley, Colorado.

B. Commission on Institutions of Higher Education

OFFICERS

Chairman—H. M. Gage, Coe College, Cedar Rapids, Iowa.

Vice-Chairman—C. S. Boucher, University of Chicago, Chicago, Illinois.

Secretary—George F. Zook, University of Akron, Akron, Ohio.

COLLEGE MEMBERS

Class of 1929

- C. H. Judd, University of Chicago, Chicago, Illinois.
 J. R. Effinger, University of Michigan, Ann Arbor, Michigan.
 G. F. Zook, University of Akron, Akron, Ohio.
 Joseph Reiner, Loyola University, Chicago, Illinois.
 W. W. Boyd, Western College for Women, Oxford, Ohio.
 F. E. Mossman, Morningside College, Sioux City, Iowa.
 W. P. McKee, Frances Shimer School, Mount Carroll, Illinois.
 E. L. Hendricks, Central Missouri State Teachers College, Warrensburg, Missouri.
 K. C. Babcock, University of Illinois, Urbana, Illinois.
 A. M. Schwitalla, St. Louis University, St. Louis, Missouri.

Class of 1930

- D. M. Edwards, Earlham College, Richmond, Indiana.
 D. J. Cowling, Carleton College, Northfield, Minnesota.
 Mary A. Malloy, College of St. Teresa, Winona, Minnesota.
 E. C. Elliott, Purdue University, Lafayette, Indiana.
 C. S. Boucher, University of Chicago, Chicago, Illinois.
 Cloyd Goodnight, Bethany College, Bethany, West Virginia.
 John Nollen, Grinnell College, Grinnell, Iowa.
 Lucia R. Briggs, Milwaukee-Downer College, Milwaukee, Wisconsin.
 J. M. Wood, Stephens Junior College, Columbia, Missouri.

- J. L. Seaton, Albion College, Albion, Michigan.

Class of 1931

- H. M. Gage, Coe College, Cedar Rapids, Iowa.
 J. P. Everett, Western State Teachers College, Kalamazoo, Michigan.
 W. E. Smyser, Ohio Wesleyan University, Delaware, Ohio.
 C. H. Rammelkamp, Illinois College, Jacksonville, Illinois.
 C. W. Hunt, Cleveland School of Education, Cleveland, Ohio.
 R. M. Hughes, Iowa State College, Ames, Iowa.
 W. P. Morgan, Western Illinois State Teachers College, Macomb, Illinois.
 G. N. Carman, Lewis Institute, Chicago, Illinois.
 M. E. Penney, James Millikin University, Decatur, Illinois.
 A. H. Upham, Miami University, Oxford, Ohio.

SECONDARY SCHOOL MEMBERS

Class of 1929

- L. M. Fort, High School, Mitchell, South Dakota.
 E. A. Spaulding, High School, Gary, Indiana.
 J. W. Studebaker, Public Schools, Des Moines, Iowa.
 E. D. Lyon, Withrow High School, Cincinnati, Ohio.
 H. B. Loomis, Hyde Park High School, Chicago, Illinois.
 J. L. Shouse, Westport High School, Kansas City, Missouri.

Class of 1930

- John Craig, High School, Muskegon, Michigan.
 Samuel Horine, High School, St. Louis, Missouri.

J. F. Wellemeyer, Wyandotte High School, Kansas City, Kansas.

Paul W. Harnley, High School, Grand Island, Nebraska.

J. W. Richards, Lake Forest Academy, Lake Forest, Illinois.

T. J. McCormack, High School, LaSalle, Illinois.

Class of 1931

George Buck, Shortridge High School, Indianapolis, Indiana.

M. R. McDaniel, Oak Park High School, Oak Park, Illinois.

H. H. Holt, St. John's Military Academy, Delafield, Wisconsin.

J. A. Painter, Steele High School, Dayton, Ohio.

Merle Prunty, Tulsa High School, Tulsa, Oklahoma.

W. W. Borden, Superintendent of Schools, South Bend, Indiana.

C. Commission on Unit Courses and Curricula

OFFICERS

Chairman—Thomas M. Deam, Assistant Superintendent of Joliet Township High School and Junior College, Joliet, Illinois.

Secretary—Will French, Principal of High School, Lincoln, Nebraska.

COLLEGE MEMBERS

Class of 1929

H. L. Smith, Dean of College of Education, University of Indiana, Bloomington, Indiana.

C. E. Chadsey, Dean of College of Education, University of Illinois, Urbana, Illinois.

John E. Foster, Dean of Men, Iowa State College, Ames, Iowa.

L. A. Pechstein, Dean of Education, University of Cincinnati, Cincinnati, Ohio.

Class of 1930

Earl Huddleson, Professor of Education, University of Minnesota, Minneapolis, Minnesota.

J. E. Stout, Dean of School of Education, Northwestern University, Evanston, Illinois.

W. L. Uhl, Professor of Secondary Education, University of Wisconsin, Madison, Wisconsin.

L. V. Koos, Professor of Secondary Education, University of Minnesota, Minneapolis, Minnesota.

Class of 1931

C. O. Davis, Professor of Secondary Education, University of Michigan, Ann Arbor, Michigan.

J. A. Clement, Professor of Education, University of Illinois, Urbana, Illinois.

R. M. Tryon, Professor of Teaching of History, University of Chicago, Chicago, Illinois.

L. W. Webb, Professor of Education, Northwestern University, Evanston, Illinois.

SECONDARY SCHOOL MEMBERS

Class of 1929

H. H. Ryan, Principal of University High School, Ann Arbor, Michigan.

H. V. Church, Principal, J. Sterling Morton High School, Cicero, Illinois.

¹H. L. Miller, Principal, University High School, Madison, Wisconsin.

C. H. Perrine, Principal, Lake View High School, Chicago, Illinois.

¹Deceased.

Class of 1930

E. H. Kemper McComb, Principal, Emerich M. T. H. S., Indianapolis, Indiana.

Wm. Frnch, Principal of High School, Lincoln, Nebraska.

Wm. Prakken, Principal of High School, Highland Park, Michigan.

W. J. S. Bryan, Assistant Superintendent of High School, St. Louis, Missouri.

Class of 1931

Thomas M. Deam, Assistant Superintendent of High School and Junior College, Joliet, Illinois.

¹L. W. Smith, Superintendent of High School and Junior College, Joliet, Illinois.

G. W. Willett, Principal of High School, LaGrange, Illinois.

R. C. Woellner, Principal of High School, University High School, University of Chicago, Chicago, Illinois.

¹Now Superintendent of Schools, Berkeley, California.

Constitution

(Revised and Adopted March 15, 1928)

Note: At the 1928 meeting of the Association the Executive Committee submitted a proposed revision of the constitution. In submitting its report the Executive Committee called attention to certain weaknesses in the old constitution, part of which were as follows:

1. There was no provision covering the expenditure of the funds of the Association.

2. The powers of the Executive Committee were not sufficiently well defined to avoid misunderstandings.

3. The provision for the election of four new members of the Executive Committee for a term of one year did not make for a desirable degree of permanency in the membership of that committee.

The draft as formulated by the Executive Committee was approved by the Association with one amendment. The adopted constitution is therefore as follows:

CONSTITUTION

ARTICLE I

NAME

The name of this Association shall be the North Central Association of Colleges and Secondary Schools.

ARTICLE II

OBJECT

The object of the Association shall be to establish closer relations between the

secondary schools and the institutions of higher education within the North Central States and such other territory as the Association may recognize.

All decisions of the Association bearing on the policy and management of secondary schools and institutions of higher education are understood to be advisory in their character.

ARTICLE III

MEMBERSHIP

Section 1. The membership of the Association shall consist of three classes: First, secondary schools and institutions of higher education; second, officers of the Association and members of the Commissions; and third, honorary members.

Section 2. Any secondary school or institution of higher education which has been approved by the Association shall be admitted to membership on the payment of the annual dues. Such membership shall cease, if, at any time, the secondary school or institution of higher education is dropped from the approved list of the Association or if the annual dues are more than one year in arrears.

Section 3. Honorary members shall be elected on the nomination of the Executive Committee and confirmation by a two-thirds vote of all the members present and voting at any regular meeting. All persons holding individual membership prior to the annual meeting, March 20 and 21, 1925, shall thereafter be honorary members.

Section 4. All individuals holding membership on Commissions of the Association or serving as elected officers of the Association shall be members of the Association with full powers except as limited by Section 5 of Article III.

Section 5. Any person engaged in the work of teaching or administration in a secondary school or institution of higher education which holds membership in the Association shall have the right to attend meetings and participate in the activities of the Association; but a secondary school or institution of higher education holding membership shall have only one vote on any question before the Association, such vote to be cast by the executive head of the secondary school or institution of higher education or by some person designated by him in credentials addressed to the Secretary.

Section 6. Honorary members shall receive the publication of the Association and have all the privileges of membership in the Association except voting, provided that this clause shall not impair the right to vote of those persons who were honorary members of the Association prior to March 1, 1928.

Section 7. Honorary members, officers of the Association, and members of the Commissions shall not be required to pay dues, as hereinafter defined.

ARTICLE IV

OFFICERS AND COMMITTEES

Section 1. The officers of the Association shall be a President, two Vice-Presidents, a Secretary, and a Treasurer. The President and two Vice-Presidents shall be elected at the annual meeting of the Association for a single term of one year or until their successors are elected. The Secretary and the Treasurer shall be appointed by the Execu-

tive Committee and shall serve without compensation.

Section 2. There shall be an Executive Committee, a Commission on Institutions of Higher Education, a Commission on Secondary Schools, a Commission on Unit Courses and Curricula, constituted as hereinafter defined.

Section 3. The Executive Committee of the Association shall consist of the President, the President of the next preceding year, the Secretary, the Treasurer, four additional members two of whom shall be elected each year by the Association for a term of two years, and the chairman of each of the Commissions provided for in Section 2. (Two of the four members of the Executive Committee elected in 1928 shall be selected for the term of one year.) The Executive Committee shall receive and report the list of members. It shall receive the approved lists prepared by the Commission on Institutions of Higher Education and the Commission on Secondary Schools, shall pass on these lists, and shall cause them to be published. The Executive Committee shall have final authority to hear and determine appeals, if any, against the findings of these Commissions in the approval of schools. It shall nominate members of the various Commissions as hereinafter provided subject to election by the Association. It shall fix the time and place of meetings not otherwise provided for; shall prepare the program for the annual meeting; shall provide for the publication of reports and proceedings; shall fill vacancies in the list of officers, and shall transact any necessary business when the Association is not in session.

The Executive Committee shall have the power to authorize and approve all expenditures of funds and each Commis-

sion shall submit to it a budget of proposed expenditures. The Executive Committee shall submit a detailed report of income and expenditures at each annual meeting. This report of the Executive Committee shall be referred to an auditing committee appointed by the President.

All the acts of the Executive Committee shall be subject to revision by the Association except where the Executive Committee has been given final authority.

Section 4. The Commission on Institutions of Higher Education shall consist of forty-eight persons representing the members of the Association, thirty from the institutions of higher education and eighteen from the secondary schools. These shall be elected for a period of three years, ten members of the first group, and six of the second to be elected annually.

This Commission shall prepare a statement of the standards to be met by institutions of higher education seeking the approval of the Association, which standards shall be submitted by the Executive Committee to the Association for approval or rejection; shall receive and consider statements made by institutions within this territory seeking to be approved by the Association; shall provide such inspections as it deems necessary; shall prepare lists of institutions which conform to the standards prescribed; and shall submit lists to the Executive Committee for final approval and publication. This Commission may, with the approval of the Executive Committee, grant an institution of higher education the freedom to waive certain standards in order that the institution may carry on an educational experiment that the Commission has approved.

Section 5. The Commission on Secondary Schools shall consist of (a) the high school inspector or corresponding officer for the state university in each state within the territory of the Association; or, in case there is no such officer, some member of its faculty designated by the state university; (b) the inspector of high schools, if any, of the state department of public instruction in each state within the territory of the Association; (c) a principal of a secondary school accredited by the Association, to be elected by the Association on the nomination of the Executive Committee for a period of three years, one-third of the number to be elected each year; and (d) eighteen other persons to be elected by the Association on the nomination of the Executive Committee for a period of three years, one-third of the number to be elected each year.

This Commission shall prepare a statement of the standards to be met by secondary schools seeking approval by the Association, which standards shall be submitted by the Executive Committee to the Association for approval or rejection. This Commission shall make such inspection of schools as it deems necessary, shall prepare lists of the secondary schools within the territory of the Association which conform to the standards prescribed, and shall submit these lists to the Executive Committee for final approval and publication. This Commission may, with the approval of the Executive Committee, grant a secondary school the freedom to waive certain standards for approval in order that the school may carry on an educational experiment that the Commission has approved.

Section 6. The Commission on Unit Courses and Curricula shall consist of

twenty-four persons, twelve representing the institutions of higher education and twelve the secondary schools, members of the Association, four of each group to be elected annually for a period of three years on the nomination of the Executive Committee.

This Commission shall plan and carry forward research relating to unit courses of study in various subjects and the curriculum in all classes of secondary schools and institutions of higher education included within the Association.

Section 7. The Commissions herein provided for shall elect their own officers, one of whom shall be designated the chairman.

Section 8. Prior to each annual meeting of the Association the President shall appoint a committee of five whose duty it shall be to nominate suitable persons for election to each office not otherwise provided by the Association. The announcement of these nominations shall be made at the first session of the Association, but elections shall take place at a later session. Independent nominations may be made upon petition by any ten members.

ARTICLE V

MEETINGS

There shall be an annual meeting of the Association at such time and place as may be determined by the Association

and such special meetings as the Association or the Executive Committee may appoint.

ARTICLE VI

FEES

To meet the expenses of the Association, an annual fee shall be paid by each member, the amount to be determined by the Association on the recommendation of the Executive Committee.

ARTICLE VII

QUORUM

At any meeting in accordance with provision of Article V, fifty voting members of the Association shall constitute a quorum.

ARTICLE VIII

AMENDMENTS

This constitution may be amended by a three-fourths vote at any regular meeting, provided that a printed notice of the proposed amendments be sent to each member two weeks before said meeting.

ARTICLE IX

PARLIAMENTARY RULES

The rules contained in Robert's Rules of Order Revised shall govern the meetings of the Association and of the Commissions in all matters to which they are applicable, and in which they are not inconsistent with this Constitution or the rules of the several bodies involved.

PRELIMINARY PROGRAM THIRTY-FOURTH ANNUAL MEETING

OF

The North Central Association of Colleges
and Secondary Schools

TUESDAY, WEDNESDAY, THURSDAY, FRIDAY

MARCH 12, 13, 14, 15, 1929

CHICAGO, ILLINOIS

HEADQUARTERS AND MEETINGS, STEVENS HOTEL

GENERAL PROGRAM OF THE ASSOCIATION

PRESIDING OFFICER—PRINCIPAL W. I.
EARLY, WASHINGTON HIGH SCHOOL,
SIOUX FALLS, SOUTH DAKOTA

THURSDAY, MARCH 14, 2:00 P. M.
GRAND BALL ROOM

PROGRAM IN CHARGE OF THE
COMMISSION ON UNIT
COURSES AND CURRICULA

Chairman, Thos. M. Deam, Asst. Supt.
of Joliet Township High School
and Junior College, Joliet, Illin-
ois.

Secretary, Will French, Principal of
High School, Lincoln, Nebraska.

1. A plan to Encourage and Recognize Exceptional Teachers at Work in North Central Association Schools. Principal Milo H.

Stuart, Arsenal Technical High School, Indianapolis, Indiana.

2. What Place Shall Observation of Teaching and Participation in Teaching Have in the Training of High School Teachers? Principal Will French, Lincoln, Nebraska.

3. The Committee's Report on Qualitative and Quantitative Standards for Use in the Reorganization of Secondary School Curricula. Professor L. W. Webb, Northwestern University.

4. The Point of View in the Development and Interpretation of Standards for Use in the Reorganization of Secondary School Curricula. Dean John E. Stout, Northwestern University.

3:30 P. M.—Business Meeting

1. Appointment of Committees. President Early.

2. Report of Executive Committee.
Secretary Edmonson.

3. Report of the Treasurer. Mr.
Mc Comb.

THURSDAY, MARCH 14, 6:00 P. M.

Banquet

NORTH BALL ROOM, STEVENS HOTEL
(Tickets may be secured at the Secretary's desk on the third floor of the Stevens Hotel.)

1. Address. Principal W. I. Early,
President of the North Central
Association of Colleges and Secondary Schools.

2. Greetings from Fraternal Delegates from Other Regional Standardizing Agencies.

3. Address. (Speaker to be announced later.)

8:30 P. M.—Meeting of Executive Committee.

FRIDAY, MARCH 15, 9.00 A. M.

GRAND BALL ROOM

PROGRAM IN CHARGE OF THE
COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION.

Chairman, President H. M. Gage, Coe
College, Cedar Rapids, Iowa.

Vice-Chairman, Dean C. S. Boucher,
University of Chicago, Chicago.

Secretary, President George F. Zook,
University of Akron, Akron, Ohio.

1. Report of the Commission on Institutions of Higher Education.
President George F. Zook, Secretary.

10:30 A. M.—Address. President
George Norlin, University of
Colorado, Boulder.

11:30 A. M.—Reports of Committees of the Association.

1. Committee on Time and Place.

2. Committee on Nominations.

FRIDAY, MARCH 15, 2:00 P. M.

GRAND BALL ROOM

PROGRAM IN CHARGE OF THE
COMMISSION ON SECONDARY SCHOOLS.

Chairman, Professor F. C. Landsittel,
Ohio State University, Columbus.

Secretary, Professor C. C. Brown
University of Colorado, Boulder.

1. Summary of Reports. Professor
C. C. Brown, Secretary.

2. Report of Business Transacted by the Commission.

3. Progress Report on Special Study for 1929-1931. Dean C. R. Maxwell, University of Wyoming.

4. Guidance in Junior and Senior High School. Principal W. E. Mc Vey, Harvey High School and Junior College, Harvey, Illinois.

3:30 P. M.—Address. William J. Cooper,
United States Commissioner of Education, Washington, D. C.

4:30 P. M.—Miscellaneous Business.

PROGRAMS OF COMMISSIONS OF THE ASSOCIATION

The constitution of the North Central Association of Colleges and Secondary Schools provides for three standing committees called commissions, as follows:

Commission on Institutions of Higher Education,

Commission on Secondary Schools,

Commission on Unit Courses and Curricula.

THE COMMISSION ON UNIT COURSES AND CURRICULA

Chairman, Thos. M. Deam, Asst. Supt. of Joliet Township High School and Junior College, Joliet, Illinois.

Secretary, Will French, Principal of High School, Lincoln, Nebraska.

WEDNESDAY, MAR. 13, 9:00 A. M.

PRIVATE DINING ROOM NO. 1

1. Reading of the Minutes. Secretary.
2. A Review of the Work of the Commission. Chairman.
3. Report of the Committee on Standards for Use in the Reorganization of Secondary School Curricula. Professor L. W. Webb, Northwestern University, chairman.
4. Sub-Committee's Report on Extra-Curricular Activities. Thomas M. Deam, Joliet, Illinois.
5. Experiments in Quantitative Standards for Physics. Professor A. W. Hurd, University of Minnesota.
6. The Interpretation of North Central Association Standards. Dean John E. Stout, Northwestern University.
7. Future Work of the Committee on Standards for Use in the Reorganization of Secondary School Curricula: General Discussion.

WEDNESDAY, MAR. 13, 2:00 P. M.

PRIVATE DINING ROOM NO. 1

1. "Practice Teaching in the Colleges of the North Central Association", George H. Colebank, Marshall College. Discussion of his article appearing in December (1928) number of the *North Central Association Quarterly*.
2. Further Work of the Committee on Professional Training of Secondary School Teachers. Principal Will French, Lincoln, Nebraska.

3. Statement of a Plan for Encouraging and Recognizing Exceptional Teachers at Work in North Central Schools. Principal Milo H. Stuart, Indianapolis, Indiana.
4. Exchange Reports from Other Commissions.
5. Plans and Policies of the Commission for the Immediate Future.
6. Report of the Nominating Committee.

THURSDAY, MARCH 14, 9:00 A. M.

PRIVATE DINING ROOM NO. 2

Applying the North Central Standards to the Reorganization of Secondary School Curricula. These reports appeared in the March, 1927, and the March, 1928, numbers of the *North Central Association Quarterly*.

1. Mathematics. Professor E. R. Breslich, University of Chicago.
2. Music. Clarence F. Dissinger, Lyons Township High School, La Grange, Illinois.
3. English. Miss Lura Blackburn, Oak Park and River Forest Township High School, Oak Park, Illinois.
4. Latin. Miss Olivia Pound, Lincoln High School, Lincoln, Nebraska.

This Commission will present its reports before the Association on Thursday afternoon.

THE COMMISSION ON INSTITUTIONS OF HIGHER EDUCATION

Chairman, President H. M. Gage, Coe College Cedar Rapids, Iowa.

Vice-Chairman, Dean C. S. Boucher, University of Chicago, Chicago, Illinois.

Secretary, President George F. Zook, University of Akron, Akron, Ohio.

MONDAY, MARCH 11, 8:00 P. M.

1. Executive Session—Board of Review.

Open only to those whose applications for accrediting are being considered.

President Gage, Dean Boucher, President Zook, Dean Effinger, Principal Buck, President Morgan. Reverend Dr. Cunningham.

Consideration of applications for accrediting.

TUESDAY, MARCH 12, 9:00 A. M.

WEST BALL ROOM

1. Executive Session—Board of Review.

2:00 P. M.

1. Executive Session—Board of Review.

2. Meetings of the Special Committees of the Commission.

8:00 P. M.

If necessary an evening session of the Board of Review will be held for the consideration of cases of accrediting.

WEDNESDAY, MAR. 13, 9:00 A. M.

WEST BALL ROOM

MEETING—Members of the Commission.

1. Roll Call.
2. Outline of program and procedure. The Chairman.
3. Report of the Secretary of the Commission.
4. Reports of Special Committees of the Commission.

- (a) Committee on Accrediting Athletic Conferences.

President H. M. Gage, Chairman.

- (b) Committee on Evening and Extension Education.

President George F. Zook, Chairman.

- (c) Committee on Faculty Scholarship. President C. H. Rammelkamp, Illinois College, Chairman.

- (d) Committee on Financial Standards for Catholic Institutions. President R. M. Hughes, Iowa State College, Chairman.

WEDNESDAY, MAR. 13, 2:00 P. M.

WEST BALL ROOM

1. Roll Call.
2. Reports of Special Committees of the Commission, continued.
- (e) Committee on Library Standards. Dean George A. Works, University of Chicago, Chairman.
- (f) Committee on Professional Training, Dean Wm. E. Smyser, Ohio Wesleyan University, Chairman; Dean M. E. Haggerty, University of Minnesota, Secretary.
- (g) Committee on Reports of High Schools. Dean C. S. Boucher, Chairman.
- (h) Committee on Revision of Standards.

- (i) Committee on Teaching Load. Dr. Arthur L. Foley, Indiana University, chairman.

3. Report of the Board of Review. George F. Zook, Secretary.

4. Recommendation to the Executive Committee of the Association of institutions to be accredited.

THURSDAY, MARCH 14, 9:00 P. M.

NORTH BALL ROOM

1. Roll Call.
2. Address. Major John L. Griffith, Commissioner of the Intercollegiate Conference.
3. Exchange report from the Com-

mission on Secondary Schools, Professor F. C. Landsittel, Chairman.

4. Exchange Report from the Commission on Unit Courses and Curricula. Thomas M. Deam, Chairman.

5. Election of Officers.

This Commission will present its reports before the Association on Friday morning.

THE COMMISSION ON SECONDARY SCHOOLS

Chairman, Professor F. C. Landsittel, Ohio State University, Columbus.

Secretary, Professor C. C. Brown, University of Colorado, Boulder.

MONDAY, MARCH 11, 7:30 P. M.

PRIVATE DINING ROOM NO. 4

Preliminary session for informal discussion of problems arising in connection with the administration of North Central Association standards in the various states. This conference will be of special interest and importance to the members of state committees and of the Committee on Standards.

TUESDAY, MARCH 12, 9:00 A. M.

SOUTH BALL ROOM

1. Registration.
2. Announcement of Committee Assignments.
3. Announcements by the Secretary.
4. Interpretative Report of the Committee on Standards.
5. Questions Relating to Interpretation of Standards.
6. Examination of High School Reports by the Reviewing Committees.

2:00 P. M.—CONTINUATION OF THE WORK OF REVIEWING COMMITTEES.

WEDNESDAY, MAR. 13, 8:30 A. M.

SOUTH BALL ROOM

1. Completion of the Work of Reviewing Committees.
2. Reports of Committees.
3. Report of the Secretary of the Commission.
4. Election of Officers.
5. Miscellaneous Business.

WEDNESDAY, MARCH 13

2:00 P. M.

SOUTH BALL ROOM

1. Exchange Report from the Commission on Higher Institutions. President H. M. Gage, Chairman.
 2. Exchange Report from the Commission on Unit Courses and Curricula. Thomas M. Deam, Chairman.
 3. The Chartering of Junior High Schools in Ohio. T. Howard Winters, Assistant State Director of Education of Ohio.
 4. General Discussion.
 5. The Changes Made in the Standards for Accrediting Secondary Schools in the North Central Association During the Past Twenty-Five Years. Professor C. O. Davis, University of Michigan.
 6. Miscellaneous Business.
- 6:30 P. M.—Commission on Secondary Schools Dinner, followed by Theater Parties.

THURSDAY, MARCH 14, 9:00 A. M.

SOUTH BALL ROOM

1. Summary of Special Investigations of the Effects of the Size of Classes upon the Effectiveness of Instruction. Manley E. Irwin, Research Department, Detroit Public Schools.

2. Results of Experimental Work Concerning Class Size in the University of Minnesota High School. Professor Earl Hudelson, University of Minnesota.
3. General Discussion.

4. Final Reports of Committees.
5. Unfinished Business.
6. Adjournment.

This Commission will present its reports before the Association on Friday afternoon.

"Debunking" the Master's Degree*

DEAN CHARLES S. SLICHTER, UNIVERSITY OF WISCONSIN

The college and university catalogues of fifty years ago contained a statement that read about as follows: "The degree of Master of Arts will be conferred on Bachelors of three years' standing who have sustained a good character, and furnish satisfactory proof of having pursued professional or other advanced studies. Application should in all cases be made to the President before Commencement, accompanied by a fee of five dollars." The good character required meant, in practice, that the candidate had successfully kept out of jail, and the pursuit of professional or other advanced studies was taken as a matter of course. The real requirements were the lapse of time and the payment of five dollars. There is no record of a fee of five dollars "received by the President before Commencement" being returned to the candidate with a refusal of a Master's diploma. This was in the Victorian era. Then at the close of that era—in fact, during the "gay nineties"—came a revolution in the whole field of higher degrees. The Master's degree was rather abruptly changed to a degree "in course" instead of a degree "of course." A year of resident study and a thesis or essay were quite generally set up as the new requirements. These new standards were primarily the result of the growth

of graduate study at Johns Hopkins University. Then came the twentieth century, the high-speed and the high-pressure age and the age of miracles. School and college officers began to offer financial rewards to holders of Master's degrees. Largely because of this there was a hurry-up demand from candidates to short-circuit the route to the degree. There arose an expansion of correspondence courses, extension work, and summer schools. The inventiveness and ingenuity of the academic world was too much devoted to the elaboration of devices for cutting corners and for the attainment of the degree and its financial reward without the pains and penalties of a full year of advanced work. Perhaps we have now reached the last stages of this development. It is the purpose of this brief paper to describe the situation as it now exists and then to open up a discussion of the way out.

Note, to begin with, one of the inevitable results of giving preferment or financial reward to the holder of a higher degree. Like many other mechanical devices, it works two ways. Any teacher or school officer, who because of lack of personality or lack of intellectual vigor and ambition, cannot secure promotion on his personal merits, has now open to him a machine method of securing promotion. Instead of weak men being starved out of the profession, they now have at hand a direct-acting device for furthering their advancement. In this limited and secondary way, we have done away with a

*This article is reprinted, by consent of the writer and on the special request of the N. C. A. Committee on the Professional Training of Secondary School Teachers, from the Proceedings of the 29th Conference of the Association of American Universities.

certain amount of natural selection. We make it possible, in part to perpetuate the weak in our schools and set up a method which permits promotions to be obtained mechanically, even by those colorless individuals who seek refuge in the teaching profession because they lack the courage and virility to face the chances and hardships of a business or professional career.

I find that the Catholic University, Chicago, Johns Hopkins, North Carolina, Nebraska, Ohio State, Pennsylvania, Princeton, Stanford, Virginia, and Yale are the only members of this Association that do not advertise short-cuts to the Master's degree. All other institutions seem to maintain a dual standard—a high standard for students in residence during the academic year and a lower standard of residence for students making use of the summer session. For example:

1. California states that two sessions or intersessions of six weeks equal one semester.

2. Columbia University places four six-week summer sessions equal to one year. In Teachers College a thesis is required in all cases, and is required in practically all departments. Extension work may be credited. Final comprehensive examinations are at the option of the department, but are nearly always a part of the requirement.

3. Cornell University reckons four six-week sessions equal to one year, but students on the summer-session basis must continue *absentia* work under their major professor during the year following the summer session.

4. At Harvard the equivalent of a year is five summer sessions of six weeks each.

5. Illinois counts four summer sessions of eight weeks taken within an interval of six years equal to one year.

6. Indiana University counts two summer sessions of eight and one-half weeks equal to a semester, but provides that half of the work may be done in extension courses made of five hours of such work pursued for three semesters.

7. Iowa recognizes three summer quarters or four six-week summer sessions together with six credits in projected registration as equivalent to a year.

8. Kansas calls three sessions of ten weeks one year and credits extension work to the amount of six hours.

9. For students not holding a baccalaureate degree from Michigan, four summer sessions of eight weeks each are equal to one year; for graduates of Michigan, the residence is three summer sessions of eight weeks each. Only under very exceptional circumstances is work in *absentia* allowed.

10. Minnesota accepts four summer sessions of six weeks and accepts no correspondence or *absentia* work.

11. Missouri uses four summer sessions of eight weeks each to make a year, and accepts correspondence work, extension work, and substitutes in place of one summer session.

12. Northwestern University equates three summer sessions of nine weeks each to the work of a year.

13. At Washington University four summer sessions of six weeks each may constitute a year.

14. Wisconsin calls six six-week or four nine-week sessions equal to one year, and permits thesis in *absentia* in

the field of education. For many years an elaborate system of *absentia* work was maintained permitting students to secure a degree in three summer sessions of six weeks each and three years of *absentia* work. This arrangement has just been discontinued. Credit is allowed, however, for certain extension courses given by members of the graduate faculty in Milwaukee.

It is obvious from the foregoing outline of requirements for the Master's degree that most of us are maintaining dual standards for that degree: First, a rigorous standard which sets up a minimum residence of two semesters or three quarters during the regular academic year where sessions are long and the number of students in lectures or in seminars are moderate, and then a second standard of residence for the short summer sessions, where time is brief and the size of classes is large and true graduate seminars impracticable. It is possible, I am informed, to obtain a Master's degree from one of our institutional members in four short summer sessions and never register in a class of less than two to five hundred. No instructor, under such a system, can receive any true impression of the ability or personality of the candidate or materially impress his students with the spirit of scholarship. We have been setting up a broadcasting or Chautauqua system and not an educational process. I am asking that we proceed to "debunk" such alleged graduate processes and standards before the public does it for us.

I have described a situation that merits serious attention from this body. A remedy is not wholly dependent upon the initiative of the members of this Association. The schoolmen themselves are now quite alive to the situation, and there is

a growing tendency among college authorities and state and city superintendents and secondary school principals to appraise the various Master's degrees at their true worth. A movement has already started at several places to decline recognition to Master's degrees obtained in four six-week summer sessions. There is at present a surplus of candidates for teaching positions and the movement to discount second and third-rate degrees is likely to grow. It will prove to be embarrassing to holders of diplomas to find that they possess heavily depreciated paper, but such is bound to be the case—in fact, in some quarters this depreciation has already taken place.

A few public-school administrators are already taking due account of this situation and have begun, as already stated, to make the necessary discriminations. If the Catholic University, Chicago, North Carolina, Nebraska, Johns Hopkins, Ohio State, Princeton, Pennsylvania, Stanford, Virginia, Yale, and a few others can pay in gold coin, why do others need to pay in doubtful paper currency? Why should we try to maintain at par so many standards?

Let me present the matter from another point of view. If we exclude from consideration those students who take a Master's degree while on the way to the doctorate, the remaining candidates fall into three principal classes: First are the candidates for technical degrees in the various engineering fields. These degrees are maintained almost universally at the very highest standards. Second are the candidates for a class of second degrees offered at the close of graduate study in the technical fields of business and administration. As far as I have been able to discover, these degrees are maintained on a very high level of at-

tainment. The third class of candidates is made up almost exclusively of those who expect to enter the teaching profession or school administration. It is here that American universities have let the bars down and have facilitated the cutting of corners and the closing of short-circuits. We would be slow to admit that there is any higher profession than the profession of teaching, or that public welfare does not require us to see that the maximum possible training is given at any given level of the profession and that ample time and ample opportunities for personal contacts with the graduate staff are unequivocally guaranteed. To defend and protect the teaching profession we must not only test out the intellectual qualities of the candidates, but must also see to their technical equipment and be able to appraise their personal and spiritual qualities. If this is to be done, then time and number of contacts must be emphasized just as much as we now emphasize the high-pressure forcing of schoolish information. Time and contacts—it is in these items that our summer sessions grievously fall below a proper level of the graduate process. It indicates the point at which we must begin to “debunk” the Master’s degree. Even as an example of high-pressure forcing, the six-week summer session is hardly a success. To a person who is fully engaged during the rest of the year, the six weeks of intensive study is not necessarily a way of making progress—it may be merely a way of standing still, a way of not going backward, or, in other words, a way not of getting ahead, but merely a way of recovering lost ground. The important universities cannot make a success of low-level work. There are scores of state teachers’ colleges now developing, and some of them

will soon confer Master’s degrees. A few are doing so now. We can be sure that these institutions will hardly be able to raise their standards above those of the older universities, although many of them may wish to do so.

I propose for your consideration and discussion the following program that may aid in “debunking” the Master’s degree:

1. Strict scrutiny of all candidates for admission to the graduate schools, especially those seeking admission to short summer sessions. This will require the submission of credentials many weeks in advance of admission and no small amount of work on the part of graduate offices. *It must be done.*

2. The requirement in all cases of not less than six summer sessions of six weeks, or four summer sessions of nine weeks, or three summer sessions of twelve weeks, as now required in at least eleven institutions in this Association.

3. The change as rapidly as possible of the six-week sessions, to sessions of at least nine weeks. A six-week session does not permit the proper conduct of a graduate seminar and is too trivial to be of benefit to candidates for the doctorate. A session of nine or more weeks will permit valuable personal contacts in graduate classes.

4. No university should credit any extension work given by another university. Only the university giving the extension courses should take the responsibility of crediting them toward a higher degree.

5. No correspondence work of any sort should be recognized for graduate credit. Only two of our institutions, I believe, now do so.

6. No *absentia* work of any sort

should be credited toward a Master's degree.

We cannot take too seriously the importance of the profession of teaching, if we are to take seriously the future of the American experiment in democracy. It is not alone the personnel in the score or more large universities that counts. More important to the welfare of the state is the personnel in the thousands of secondary schools of this country—the teachers whose duty to youth is “to declare the things of life as the dawn first glows with the coming day.” It is vital

that we lead to the staffs of our public and private schools of all grades the highest type of men and women—persons of ambition, scholarship, and sterling, virile character—and that we continually shunt away from this profession the weaklings we cannot trust with great duties. A part—perhaps a large part—of this responsibility leads back eventually to the institutions of higher learning. The standards and attainments required for the degree primarily sought by teachers is not a matter of indifference.

The Triennial Reports of Accredited Higher Institutions

(Report of the Secretary)

BY GEORGE F. ZOOK

The regular triennial reports from the colleges, universities, junior colleges, and teacher-training institutions accredited by the Association were received prior to the 1928 meeting. Since that time the statistical data have been tabulated, and various supplementary tables have been drawn up in the Secretary's office.

Instead of attempting publication of the complete statistics, some of which are more or less a repetition of statistics published by other agencies, such as the U. S. Bureau of Education, an effort has been made to relate the information gathered to the standards of the Association, for the purpose of ascertaining the degree to which the various standards are being complied with by the institutional members. It is hoped that this manner of presentation will be of considerable value both to the Association and to the institutions concerned.

While reports were received from all of the 251 institutions accredited by the Association in 1927, considerable correspondence was necessary to clarify points which had been misunderstood or omitted. In fact, more than two hundred personal letters or telegrams have been sent to executives of various institutions in an effort to assure comparable data. Information pertaining to a few matters is even yet not entirely complete, but it

has been thought best not to delay publication further.

In connection with those standards where compliance with the requirements is relative and data could be secured, lists have been prepared showing the lowest institutions with reference to each standard.

In some cases the lists show all institutions which do not comply with the requirements; in most cases the 20 lowest have been selected. These lists are naturally not of equal significance, as all institutions included in some of them are above the minimum standard set by the Association, while all institutions included in others are below the requirements.

It will be noticed that in some cases the small colleges are most deficient; in other cases the larger institutions are just as deficient as the smaller.

The last table in the college section and the last table in the junior college section are composite lists of all institutions included in the lowest groups with reference to each standard. No attempt has been made to weight the various tables or to make general comparisons. However, this compilation has served to call attention to certain institutions which might be eligible for reinspection.

Table 1. Summary of Students Admitted to Colleges and Universities,
First Semester, 1927-28 (Standard No. 2)

	Students Admitted	% of Total No. of New Students	No. of Institutions	% of Total No. of Institutions
1. Meeting Standards:				
With 15 units as required.....	68,367	94.5	163	100.0
2. Not Meeting Standards:				
a. With 14 units	1,047	1.4	80	49.1
b. With 13 units	161	.2	31	19.0
c. With less than 13 units.....	142	.2	20	12.3
Total regular students not meeting standards	1,350	1.9	83	50.9
d. Special Students	2,631	3.6	115	70.6
Total all students (including specials) not meeting standards	3,965	5.5	129	79.1
Total	72,348		163	

COLLEGES AND UNIVERSITIES

Standard No. 1. Definition

A standard American college, university or technological institution—designated as “college” in this statement of standards—is an institution:

(a) which is legally authorized to give non-professional Bachelor’s degrees;

(b) which is organized definitely on the basis of the completion of a standard secondary school curriculum;

(c) which organizes its curricula in such a way that the early years are a continuation of, and a supplement to the work of the secondary school and at least the last two years are shaped more or less distinctly in the direction of special, professional or graduate instruction.

Since the first standard of the Association merely defines the term “college,” only institutions of a type within the scope of this definition are eligible for accrediting and are included in the approved list.

Standard No. 2. Admission

The college shall require for admission at least fifteen units of secondary work

as defined by this Association, or the equivalent. These units must represent work done in a secondary school approved by a recognized accrediting agency or evidenced by the result of examinations. The major portion of the units accepted for admission should be definitely correlated with curriculum to which the student is admitted.

The second standard requires at least fifteen units of approved secondary school work for entrance. According to Table 1, 83 institutions have admitted 1350 regular students with less than 15 units, an average of 16.3 students per institution. When we add to this number the special students admitted, we find a total of 3,965 students admitted by 129 institutions without meeting the entrance requirements, an average of 30.7 students per institution.

Another very significant fact shown by the table is that 20 colleges and universities have admitted 142 regular students with less than 13 entrance units, an average of 7.1 students per institution. While a half-unit or a unit of condition may occasionally be justified,

Table 2. The Twenty Colleges and Universities Admitting the Largest Percentage of Conditioned Students, First Semester, 1927-28 (Standard No. 2)

Institutions	No. of New Students Admitted	No. of Conditioned Students Admitted	% of Conditioned Students Admitted	No. of Special Students Admitted	% of Special Students Admitted	Total No. of Students Admitted Without Meeting Standards	% of Total No. of Students Admitted Without Meeting Standards
1. Phillips	184	11	5.9	5	2.7	16	8.6
2. Hiram	97	6	6.1	2	2.06	8	8.2
3. S. Dakota University	359	22	6.1	1	.27	23	6.4
4. Coe	280	18	6.4	1	.35	19	6.7
5. Western Reserve	575	37	6.4	3	.52	40	6.9
6. Iowa State University	1,523	99	6.5	38	2.4	137	8.9
7. James Milliken	238	16	6.7	13	5.4	29	12.1
8. Simpson	275	20	7.2	3	1.09	23	8.3
9. Michigan State College of Agriculture	1,138	89	7.8	1	.09	90	7.9
10. Drury	159	13	8.1	8	5.03	21	13.2
11. Drake	567	49	8.6	6	1.05	55	9.7
12. Iowa State College of Agriculture	1,424	128	8.9	8	.55	136	9.5
13. St. Benedict's	89	8	8.9	21	23.5	29	32.5
14. Detroit, City of	633	58	9.1	35	5.5	93	14.6
15. Colorado College	244	23	9.4	48	19.6	71	29.09
16. Denison	323	33	10.2	0	0	33	10.2
17. Lewis	370	40	10.8	67	18.1	107	28.9
18. Marietta	120	15	12.5	11	9.1	26	21.6
19. Grinnell	261	38	14.5	7	2.6	45	17.2
20. Wyoming	418	94	22.4	20	4.7	114	27.2

it is difficult to understand the admission of students with three years or less of high school work.

In addition to the conditioned students shown by Table 1, 110 institutions admitted 5,251 students with 15 units, who were deficient in required subjects. Such subject deficiencies, however, are not contrary to the provisions of the standard.

On the whole, this is a very good showing. It is clear that with the growth of accredited high schools, the number of instances where there is a likelihood of students not meeting the standard is less than it was fifteen or twenty years ago. The formal standard is still important, but comparatively not so important as formerly.

Standard No. 3. Graduation

The college shall require for graduation the completion of a minimum quantitative requirement of 120 semester hours* of credit (or the equivalent in term hours, quarter hours, points, majors or courses), with further scholastic qualitative requirements adapted by each institution to its conditions.

This standard is now being met by a high percentage of institutions, and no longer constitutes a problem. It has, of course, been necessary to make exceptions in the case of the ten institutions listed in Table 4, which permit

*A semester hour is here used to designate credit for one class period per week of not less than fifty minutes for one semester of at least 18 weeks.

Table 3. Graduation, Colleges and Universities, 1927 (Standard No. 3)

1. Number of institutions meeting requirement of 120 semester hours or equivalent for graduation.....	163	—	100%
2. Number of institutions meeting requirement for scholastic requirement	149	—	91%
3. Number of institutions allowing graduation with less than 120 semester hours because of high grades, regular attendance, or other circumstances	10	—	6.1%
4. Minimum amount of work required for degree in courses not open to freshmen and sophomores:			
Average	43.6	semester hours	
Median	40	semester hours	
5. Total number of students graduated with degree.....	30,200		
Ratio of students graduated with degree to number admitted.....	1:2.29		
Ratio of students graduated with degree to total enrollment (excluding summer session, evening, etc.).....	1:7.3		

Table 4. Colleges and Universities Allowing Graduation with Less Than 120 Semester Hours Because of High Grades, Regular Attendance, or Other Circumstances (Standard No. 3).

Antioch College	High grades
Culver-Stöckton College	" "
Iowa, State University of	" "
Minnesota, University of	" "
Missouri, University of	" "
Missouri Valley College	" "
St. Thomas College	" "
South Dakota State College of A. and Mech. Arts	" "
Drury College	Other circumstances
New Mexico, State University of...	" "

Table 5. Colleges and Universities Without Qualitative Scholastic Requirements (Standard No. 3).

Colorado, University of
Iowa State College
North Dakota Agric. College
Notre Dame, University of

graduation for degree in specified instances with less than 120 semester hours.

However, in most cases this is being done by institutions whose standards are not otherwise in question; and they can probably maintain successfully that their students are getting the full equivalent

of training that is obtained by students elsewhere.

While Standard No. 3 makes no requirement as to the amount of work required for a degree in courses which are not open to freshmen and sophomores, it is clear that the proportion of advanced work required toward the degree is very important.

The median number of semester hours is 40 or 1-3 of the required number. This is very good as an average; but when it is realized that there are as many institutions which require less of this advanced work as require more, one may very well be apprehensive with the former institutions as to the quantity and quality of work in the junior and senior years. The information on this subject has been compiled and is summarized in Table 3. Likewise the ratio of students graduated with degree to the number of students admitted and to the total enrollment shows the holding power of an institution.

Only a very few institutions, as shown by Table 5, do not enforce some type of qualitative standard in addition to the quantitative standard, as specified by Standard No. 3.

Standard No. 4. Faculty—Size

The college of 200 students or less, with a single curriculum, shall maintain at least eight distinct departments, each having at least one person of professorial rank, giving full time to the college work of his department. The size of the faculty should bear a definite relation to the type of institution, the number of students, and the number of courses offered. With the growth of the student body the number of full-time teachers should be proportionately increased. The development of varied curricula shall involve the addition of further heads of departments.

It is not possible to publish any statistics which apply directly to this standard, although considerable information has been obtained from each institution which helps in gauging the efficiency of the institution and the degree to which it meets the requirements of the Association.

Standard No. 5. Faculty—Service

The minimum scholastic requirement of all teachers shall be graduation from a college belonging to this Association, or the equivalent. The training of the members of the faculty of professorial rank shall include at least two years of study in their respective fields of teaching in a recognized graduate school, presumably including the Master's degree. For heads of departments, training should be equivalent to that required for the Ph.D. degree or should represent corresponding professional or technological training. The teacher's success is to be determined by the efficiency of his teaching as well as his research work. The college should be judged in large part by the ratio which the number of persons of professorial rank with sound

training, scholarly achievement and successful experience as teachers, bears to the total number of the teaching staff.

Much time has been expended in compiling figures relative to training of faculty. In the very nature of the case, it is likely that there will be some discrepancies. Also, I would call your attention to the special report submitted by our Committee on Faculty Scholarship at the last annual meeting and published in the September, 1928, issue of the Quarterly. A few changes have been made since that time to take care of errors made by a number of institutions in their first reports.

Figures presented in Table 6 confirm the facts presented in that report and make it clear that the institutions accredited by the Association are probably meeting this standard in a less satisfactory way than any other. The problem of determining "the equivalent" is often very baffling and necessarily leaves much to the judgment of those who fill out the reports and to the Secretary of the Commission.

In my opinion, we should either modify the standard to some extent or exert increasing pressure more nearly to approximate the standard. I believe that the latter course is the wise one to pursue and I have therefore endeavored to work in this direction, particularly with institutions applying for accrediting.

The general problem is further complicated by special members of the faculty in music, art, and home economics often conducted in connection with colleges of liberal arts, and by technical schools of engineering, agriculture, etc. in larger institutions where it is not so usual nor so necessary to meet the formal academic requirements which have been established in liberal arts colleges.

Table 6. Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

Note—In specialized institutions, the entire faculty is included.

INSTITUTIONS	TOTAL L. A. FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.
Akron	47	28	59.5	15	7	46.6	11	6	54.5	21	15	71.4
Albion	45	28	62.2	22	9	40.9	5	3	60	18	16	88.8
Alma	21	12	57.1	15	6	40	0	0		6	6	100
Antioch	57	33	57.9	21	9	42.8	11	6	54.5	25	18	72
Arizona	69	46	66.6	16	12	75	41	23	56.1	12	11	91.7
Arkansas	62	55	88.7	16	13	81.2	21	17	80.9	25	25	100
Armour	77	28	36.3	11	3	27.2	44	10	22.7	22	15	68.1
Augustana	26	11	42.3	13	3	23.1	6	1	16.6	7	7	100
Baker	26	13	50	17	9	52.9	7	2	28.5	2	2	100
Baldwin-Wallace	35	8	32	23	6	26.1	2	2	100	0	0	
Battle Creek	27	26	70.2	13	7	53.8	8	3	37.5	16	16	100
Beloit	44	28	63.6	24	10	41.6	9	9	100	11	9	81.8
Bethany	25	14	56	14	7	50	8	4	50	3	3	100
Bradley	48	28	58.3	16	5	31.2	3	0	0	29	23	79.3
Butler	67	47	70.1	17	12	70.5	24	9	37.5	26	26	100
Capital	25	17	68	11	4	36.3	2	1	50	12	12	100
Carleton	73	68	93.1	23	18	78.2	16	16	100	34	34	100
Carroll	22	20	90.9	11	9	81.8	5	5	100	6	6	100
Carthage	20	10	50	10	5	50	0	0	0	10	10	100
Case	66	36	54.5	14	6	42.8	25	5	20	27	25	92.6
Central	27	22	81.4	14	10	71.4	7	6	85.7	6	6	100
Chicago	383	318	83	32	31	96.8	260	197	75.7	91	90	98.9
Cincinnati	80	69	86.2	16	16	100	40	29	72.5	24	24	100
Coe	47	32	68	17	8	47	14	8	57.1	16	16	100
Colorado, Agricultural	102	38	37.2	21	5	23.8	55	7	12.7	26	26	100
Colorado, College	45	29	64.4	15	9	60	18	8	44.4	12	12	100
Colorado, University of	90	58	64.4	20	13	65	47	25	53.1	23	20	86.9
Columbia	23	21	91.3	11	10	90.9	10	9	90	2	2	100
Concordia	30	18	60	16	7	43.7	3	0	0	11	11	100
Cornell	39	28	71.7	22	12	54.5	4	3	75	13	13	100

Table 6 (Continued). Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

INSTITUTIONS	TOTAL L. A. FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.
Creighton	26	20	76.9	9	8	88.8	10	5	50	7	7	100
Culver—Stockton	23	3	13	18	3	16.6	4	0	0	1	0	0
Dakota Wesleyan	21	9	42.8	14	6	42.8	4	0	0	3	3	100
Denison	63	29	46	23	12	52.1	21	4	19	19	13	68.4
Denver	52	41	78.8	20	10	50	12	11	91.6	20	20	100
De Paul	37	26	70.2	17	7	41.1	6	5	83.3	14	14	100
De Pauw	89	58	65.1	23	11	47.8	39	20	51.2	27	27	100
Detroit, College of City	99	67	67.6	21	5	23.8	26	10	38.4	52	52	100
Doane	21	14	66.6	14	8	57.1	1	0	0	6	6	100
Drake	38	19	50	19	11	59.8	12	1	8.3	7	7	100
Drury	27	17	62.9	13	8	61.5	4	1	25	10	8	80
Dubuque	24	10	41.6	15	5	33.3	4	0	0	5	5	100
Earlham	37	27	72.9	15	13	86.6	19	11	52.6	3	3	100
Emporia	21	12	57.1	13	6	46.1	2	1	50	6	5	83.3
Eureka	22	14	63.6	13	6	46.1	4	3	75	5	5	100
Franklin	24	10	41.6	14	4	28.5	7	3	42.8	3	3	100
Grinnell	53	40	75.4	22	16	72.7	18	11	61.1	13	13	100
Gustavus Adolphus	20	8	40	20	8	40	0	0	---	0	0	---
Hamline	37	23	62.1	22	12	54.5	9	5	55.5	6	6	100
Hanover	21	13	61.9	15	7	46.6	1	1	100	5	5	100
Hastings	28	18	64.2	14	8	57.1	4	0	0	10	10	100
Heidelberg	30	7	23.3	30	7	23.3	0	0	---	0	0	---
Hendrix	19	14	73.6	10	6	60	7	6	85.7	2	2	100
Hillsdale	31	13	41.9	18	7	38.8	7	1	14.2	6	5	83.3
Hiram	30	19	63.3	18	9	50	2	1	50	10	9	90
Hope	21	13	61.9	10	2	20	0	0	---	11	11	100
Huron	23	6	26	21	5	23.8	2	1	50	0	0	---
Illinois College	23	17	73.9	12	10	83.3	3	0	0	8	7	87.5
Illinois, University of	296	293	98.9	19	18	94.7	74	72	97.2	203	203	100
Illinois Wesleyan	33	22	66.6	17	10	58.8	11	7	63.6	5	5	100

Table 6 (Continued). Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

INSTITUTIONS	TOTAL L. A. FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.
Illinois Woman's College	27	5	18.5	27	5	18.5	0	0	---	0	0	---
Iowa Indiana	204	145	71	30	21	70	115	69	60	59	55	93.2
Iowa St. College of Agric.	462	262	56.7	44	11	25	209	58	27.7	209	193	92.3
Iowa, St. Univ. of	210	168	80	20	14	70	102	70	68.6	88	84	95.4
Iowa Wesleyan	17	5	29.4	13	4	30.7	3	0	0	1	1	100
James Milliken	27	15	55.5	13	5	38.4	9	5	55.5	5	5	100
Jamestown	26	6	23.4	11	4	36.3	11	0	0	4	2	50
John Carroll	21	21	100	10	10	100	2	2	100	9	9	100
Kalamazoo	29	23	79.3	12	6	50	6	6	100	11	11	100
Kansas, St. Agric. College	170	105	61.7	18	9	50	103	49	47.5	49	47	95.9
Kansas, University of	221	150	67.4	22	13	59	115	57	49.5	84	80	95.2
Kenyon	19	15	78.9	12	11	91.6	7	4	57.1	0	0	---
Knox	42	27	64.2	13	10	76.9	16	4	25	13	13	100
Lake Erie	27	12	44.4	17	9	52.9	7	1	14.2	3	2	66.6
Lake Forest	22	12	54.5	14	10	71.4	6	0	0	2	2	100
Lawrence	64	45	83.3	10	10	100	36	27	75	18	18	100
Lewis	45	18	40	18	6	33.3	14	0	0	13	12	92.3
Lindenwood	44	29	65.9	19	7	36.8	4	1	25	21	21	100
Loretto Heights	17	5	29.4	16	4	25	0	0	---	1	1	100
Loyola	24	17	70.8	15	9	60	9	8	88.8	0	0	---
Luther	29	22	75.8	18	11	61.1	1	1	100	10	10	100
Macalester	34	14	41.1	16	6	37.5	16	7	43.7	2	1	50
Marquette	30	16	53.3	15	4	26.6	4	1	25	11	11	100
Marquette	68	44	64.7	13	8	61.5	29	11	37.9	26	25	96.1
Marygrove	58	38	65.5	27	15	55.5	8	0	0	23	23	100
Miami	82	61	74.3	21	17	80.9	51	34	66.6	10	10	100
Michigan, St. College of Agric.	79	55	69.6	8	5	62.5	28	7	25	43	43	100

Table 6 (Continued). Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

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Michigan, University of	313	280	89.3	28	28	100	148	115	77.7	137	137	100
Milwaukee-Downer	23	14	60.8	14	7	50	4	2	50	5	5	100
Minnesota	203	171	84.2	23	16	69.5	93	73	78.4	87	82	94.2
Missouri, University of	96	91	94.7			....	56	51	91	40	40	100
Missouri Valley	17	7	41.1	11	3	27.2	3	1	33.3	3	3	100
Monmouth	26	17	65.3	14	8	57.1	5	2	40	7	7	100
Moniana, St. College	28	19	67.8	9	4	44.4	10	6	60	9	9	100
Montana, St. University	97	55	56.7	22	9	40.9	43	16	37.2	32	30	93.7
Morningside	47	31	65.9	17	10	58.8	5	2	40	25	19	75
Mount St. Joseph	30	14	46.6	13	5	38.4	8	0	0	9	9	100
Mount Union	32	15	46.8	17	6	35.2	8	2	25	7	7	100
Muskingum	49	17	34.6	20	6	30	21	3	14.2	8	8	100
Nebraska, University of	191	132	69.1	30	19	63.3	88	40	45.4	73	73	100
Nebraska Wesleyan	32	11	34.3	18	5	27.7	11	3	27.2	3	3	100
New Mexico College of Agric.	20	5	25	11	2	18.1	8	2	25	1	1	100
New Mexico, State Univ. of	28	21	75	15	10	66.6	6	4	66.6	7	7	100
North Central	30	16	53.3	18	8	44.4	3	0	0	9	8	88.8
North Dakota, Agric.	51	41	80.3	14	8	57.1	6	2	33.3	31	31	100
North Dakota, Univ. of	51	33	64.7	17	10	58.8	18	7	38.8	16	16	100
Northwestern	159	128	80.5	20	19	95	70	61	87.1	69	48	69.5
Notre Dame	108	73	67.5	20	14	70	43	14	32.5	45	45	100
Oberlin	106	82	77.3	24	19	79.1	55	37	67.2	27	26	96.2
Ohio State Univ.	129	117	90.7	9	8	88.8	41	30	73.1	79	79	100
Ohio University	58	23	39.6	19	9	47.3	28	3	10.7	11	11	100
Ohio Wesleyan	106	68	64.1	24	18							
Oklahoma Agric. and Mech.	55	31	56.3	10	6	75	45	13	28.8	37	37	100
Oklahoma College for Women	33	19	57.5	14	6	60	31	11	35.4	14	14	100
						42.8	14	8	57.1	5	5	100

Table 6 (Continued). Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

INSTITUTIONS	TOTAL L. A. FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.
Oklahoma, Univ of	282	116	41.1	47	12	25.5	166	35	21	69	69	100
Ottawa	21	13	61.9	11	8	72.7	6	1	16.6	4	4	100
Otterbein	27	12	44.4	23	8	34.7	4	4	100	0	0	...
Ouachita	14	8	57.1	10	7	70	4	1	25	0	0	...
Park	33	25	75.7	14	9	64.2	5	2	40	14	14	100
Parsons	27	17	62.9	14	6	42.8	6	4	66.6	7	7	100
Penn	23	12	52.1	15	6	40	6	2	50	4	4	100
Phillips	25	9	36	16	6	37.5	9	3	33.3	0	0	...
Purdue	141	100	70.9	8	5	62.5	59	21	35.5	74	74	100
Rockford	33	24	72.7	14	10	71.4	13	8	61.5	6	6	100
Rosary	29	18	62	12	4	33.3	4	2	50	13	12	92.3
Rose Polytechnic	19	4	21	10	3	30	5	0	0	4	1	25
St. Ambrose	16	10	62.5	9	3	33.3	0	0	...	7	7	100
St. Benedict's	16	5	31.2	11	2	18.1	1	0	0	4	3	75
St. Catharine	43	30	69.7	16	9	56.2	6	0	0	21	21	100
St. Louis	47	34	72.3	22	9	40.9	12	12	100	13	13	100
St. Mary's-Notre Dame	45	16	35.5	17	6	35.2	19	1	52.6	9	9	100
St. Mary's-Prairie du Chien	20	6	30	11	0	0	5	2	40	4	4	100
St. Mary's-St. Mary's	15	3	20	10	1	10	3	0	0	2	2	100
St. Mary-of-the-Woods	36	16	44.4	18	5	27.7	7	3	42.8	11	8	72.7
St. Olaf	59	38	64.4	17	11	64.7	26	11	42.3	16	16	100
St. Teresa	33	14	42.4	21	7	33.3	3	0	0	9	7	77.7
St. Thomas	30	7	23.3	8	3	37.5	22	4	18.1	0	0	...
St. Xavier	25	14	56	14	3	21.4	0	0	...	11	11	100
Shurtleff	12	5	41.6	10	4	40	2	1	50	0	0	...
Simpson	35	14	40	18	7	38.8	17	7	41.1	0	0	...
S. Dakota State S.	21	4	19	21	4	19	0	0	...	0	0	...
S. Dakota State C.	88	40	45.4	29	8	27.5	34	10	29.4	25	22	88
Agric												

Table 6 (Continued). Faculty Training in Liberal Arts Colleges, 1927-28 (Standard No. 5)

INSTITUTIONS	TOTAL L. A. FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number Meeting N. C. A. Sds.	Per Cent Meeting N. C. A. Sds.	Total Number	Number Meeting N. C. A. Sds.	Per Cent Meeting N. C. A. Sds.	Total Number	Number Meeting N. C. A. Sds.	Per Cent Meeting N. C. A. Sds.	Total Number	Number Meeting N. C. A. Sds.	Per Cent Meeting N. C. A. Sds.
S. Dakota, University of	59	38	64.4	21	15	71.4	20	8	40	18	15	83.3
Southwestern	40	21	52.5	17	11	64.7	19	7	36.8	4	3	75
Toledo	61	40	65.5	18	12	66.6	19	9	47.3	24	19	79.1
Wabash	29	19	65.5	15	7	46.6	7	5	71.4	7	7	100
Washburn	41	29	70.7	19	11	57.8	11	7	63.7	11	11	100
Washington	146	123	84.2	24	20	83.3	60	43	71.6	62	60	96.7
Webster	30	20	66.6	11	3	27.2	1	0	0	18	17	94.4
W. Virginia Collegiate Inst.	29	13	44.8	16	2	12.5	1	0	0	12	11	91.6
W. Virginia University	105	104	99	16	15	93.7	52	52	100	37	37	100
W. Virginia Wesleyan	21	10	47.6	16	8	50	5	2	40	0	0	---
Western College for Women	37	18	48.6	18	6	33.3	8	1	12.5	11	11	100
Western Reserve	115	89	77.3	31	21	67.7	41	25	60.9	43	43	100
Westminster	17	7	41.1	12	4	33.3	2	0	0	3	3	100
Wheaton	30	20	66.6	9	4	44.4	11	6	54.5	10	10	100
Wichita	45	22	48.8	23	12	52.1	14	3	21.4	8	7	87.5
William Jewell	20	15	75	16	13	81.2	3	1	33.3	1	1	100
Wisconsin	274	234	85.4	28	25	89.2	137	101	73.7	109	108	99
Wittenberg	69	49	71	30	17	56.6	23	17	73.9	16	15	93.7
Wooster	65	42	64.6	26	15	57.6	22	12	54.5	17	15	88.2
Wyoming	43	36	83.7	13	9	69.2	9	6	66.6	21	21	100
Yankton	19	14	73.6	10	6	60	0	---	---	9	8	88.8
Total	9763	6514	66.7	2773	1438	51.8	3708	1963	52.9	3282	3128	95.3
Average	59.94	39.96	66.6	17.12	8.8	51.4	24.3	12.9	53	22.17	21.13	95.3
Median	---	---	63.3	---	---	50	---	---	44.05	---	---	100

Table 7. Faculty Salaries in Liberal Arts Colleges, 1927-28

	Number of Institutions	Highest Average	Lowest Average	Median Average	Median Average of Highest Quartile	Median Average of Lowest Quartile
Professors	152	\$6,130.00	\$2,000.00	\$3,013.50	\$4,500.00	\$2,467.50
Associate Professors..	97	4,122.00	1,566.00	2,828.00	3,500.00	2,140.00
Assistant Professors..	124	3,500.00	1,600.00	2,417.00	2,809.00	1,946.00
Instructors	132	2,693.00	1,350.00	1,900.00	2,167.00	1,650.00

The data on faculty training secured this year were limited to the liberal arts colleges so as to make possible cooperation with the Committee on Faculty Scholarship. In such institutions as technical or agricultural colleges not attached to universities, it was necessary to include the entire faculty.

Referring to Table 7, it will be seen that faculty salaries are not high, but are undoubtedly more satisfactory than in early years.

While no specific salary requirement is set forth in the standard, information is always interesting and suggestive at individual institutions. In compiling the data for Table 7, Catholic institutions without a standard salary scale have been excluded.

It is not clear in all cases whether the figures furnished by individual institutions are for the academic year or for the calendar year, nor whether salaries for evening, extension, and correspondence work have been included; but it is believed that this has not been done except in a very few cases.

It is quite usual for members of the faculty to secure additional compensation for evening school work, extension classes, correspondence work, summer school work, and for other types of service. This fact will be further set out in a special report on evening and extension work to be submitted by a committee dealing with that subject.

Table 8. Faculty Training—Twenty Lowest Colleges and Universities (Standard No. 5).

	% of Liberal Arts Faculty Meeting NCA Standards
1. *Armour	36.3
2. Phillips	36.0
3. St. Mary's—Notre Dame	35.5
4. Muskingum	34.6
5. Nebraska Wesleyan	34.3
6. Baldwin-Wallace	32.0
7. St. Benedict's	31.2
8. St. Mary's—Prairie du Chien	30.0
9. Iowa Wesleyan	29.4
10. Loretto Heights	29.4
11. Huron	26.0
12. New Mexico A. and M.	25.0
13. Heidelberg	23.3
14. St. Thomas	23.3
15. Jamestown	23.0
16. *Rose Polytechnic	21.0
17. St. Mary's—St. Mary's	20.0
18. *South Dakota State School of Mines	19.0
19. Illinois Woman's College	18.5
20. Culver-Stockton College	13.0

*Entire faculty included

Standard No. 6. Faculty—Service

The number of hours of class-room work given by each teacher will vary in different departments. To determine this, the amount of preparation required for the class and the amount of time needed for study to keep abreast of the subject, together with the number of students, must be taken into account. Teaching schedules exceeding 16 recitation hours or their equivalent per week, per instructor, will be interpreted

as endangering educational efficiency. Institutions which have teachers whose schedules exceed this number must report the facts annually to the Secretary of the Commission on Institutions of Higher Education.

Table 9. Teaching Hours, Colleges and Universities, First Semester 1927-28 (Standard No. 6).

		Per Cent
TOTAL FACULTY	9526	
A. Number meeting North Central Association Standards	8813	92.5
1. Number teaching not more than 12 hours	5079	53.4
2. Number teaching 13 or 14 hours	1472	15.4
3. Number teaching 15 or 16 hours	2262	23.7
B. Number not meeting North Central Association Standards	713	7.5
1. Number teaching 17 or 18 hours	503	5.3
2. Number teaching over 18 hours	210	2.2

It is perhaps not a cause for alarm that, as shown by Table 9, 7.5% of the faculty are teaching more hours than the standard permits. Exceptions always have to be made in this standard. The standard itself recognizes this fact. In some instances the subject is repeated in several sections; in others the load varies a great deal according to the amount of laboratory work done, etc.

However, there are a number of institutions which have a much higher percentage of the faculty exceeding the standard than seems at all justifiable. Furthermore, the figures here presented do not really tell the whole story, since usually evening and extension classes are not included. A special report in this field shows that the matter is growing into a real problem, which needs the attention of the Association. We may gradually, especially in urban centers, be tempting our faculty through extra compensation to take on more hours of instruction than they should.

Attention is also called to the last sentence in the standard, which, so far as I know, has never been observed and is not feasible. There is no more reason to require an annual report of deficiencies along this line than in connection with any other standard. I would recommend, therefore, that this requirement be stricken out of the standard.

Table 10. Colleges and Universities Teaching Hours—Twenty Institutions with Highest Percentage of Faculty Teaching More Than 16 Hours (Standard No. 6).

1. Albion	20.5
2. St. Teresa	21.2
3. Lewis	22.2
4. Carthage	22.7
5. Wichita	22.7
6. Otterbein	23.1
7. Jamestown	23.8
8. Muskingum	24.4
9. Huron	25.0
10. West Virginia Collegiate	25.0
11. Wheaton	25.0
12. Iowa Wesleyan	29.4
13. Hendrix	33.3
14. Alma	40.0
15. Gustavus-Adolphus	40.0
16. Morningside	48.3
17. Capital	51.4
18. Hope	55.0
19. Westminster	56.3
20. Augustana, Rock Island	87.5

Standard No. 7. Size of Classes

Classes (exclusive of lectures) of more than thirty students should be interpreted as endangering educational efficiency. Institutions which have classes of larger size shall report the fact annually to the Secretary of the Commission.

Much question has recently been raised regarding the soundness of this standard. The standard as such, however, is not mandatory, but advisory with warning. It is well known that the size

of classes is only one factor, to say the least, in a successful institution. In this instance the large institutions according to their number perhaps more frequently violate the standard than do the smaller ones.

In the same way as in the previous standard the requirement for an annual report required should be eliminated, and for the same reasons.

Table 11. Size of Classes, Colleges and Universities, First Semester, 1927-28 (Standard No. 7).

	Per Cent
TOTAL NUMBER OF CLASSES 30839	
A. Number of classes meeting North Central Association Standards. 25880	83.9
1. Number of classes with 1-5 students	3718...12.1
2. Number of classes with 6-10 students	4319...14
3. Number of classes with 11-20 students	8571...27.7
4. Number of classes with 21-30 students	9272...30.1
B. Number of classes not meeting North Central Association Standards	4959...16.1
1. Number of classes with 31-40 students	3171...10.2
2. Number of classes with 41-50 students	890...2.9
3. Number of classes with 51-60 students	381...1.3
4. Number of classes with over 60 students	517...1.7

Standard No. 8. Preparation of Students for Advanced Study

The college shall be able to prepare its graduates to enter graduate schools as candidates for the advanced degrees.

No attempt has as yet been made by the North Central Association to secure data from the various graduate schools as a basis for determining the standing of member institutions under this standard.

Table 13 summarizes the graduate or advanced degrees offered or conferred by member colleges and universities within the past three years.

Table 12. Size of Classes—Twenty Colleges and Universities Having the Largest Percentage of Classes Over 30 (Standard No. 7).

	Per Cent
1. Monmouth	25.2
2. De Paul	25.4
3. Albion	25.9
4. Washington	26.0
5. De Pauw	26.7
6. Kalamazoo	27.0
7. Michigan State College of Agric.	27.0
8. St. Louis	27.3
9. St. Olaf	27.6
10. Indiana	28.7
11. Oklahoma College for Women	31.4
12. Cincinnati	32.3
13. Notre Dame	32.5
14. Northwestern	34.2
15. Butler	35.3
16. Minnesota	36.5
17. William Jewell	37.5
18. Oklahoma, Univ. of	41.9
19. Ohio State	42.3
20. Loyola	48.3

Standard No. 9. General Standards

The character of the curriculum, the efficiency of the instruction and the scientific spirit, the standard for regular degrees, conservatism in granting honorary degrees, and the tone of the institution shall be factors in determining eligibility for accrediting.

No specific data were secured relative to this standard, although much of the information furnished has a general significance.

Standard No. 10. Registration

No institution shall be admitted to the accredited list, or continued more than one year on such list, unless it has a regular college registration of at least

100 students. A notably small proportion of college students registered in the third and fourth years, continued over a period of several years, will constitute ground for dropping an institution from the accredited list.

Table 13. Graduate or Advanced Degrees Conferred by Colleges and Universities Within the Three Years Preceding Report (1925-27 Inc.).

Number of degrees	Degrees	Number of institutions granting degrees
5562.....	M. A.	57
2745.....	M. S.	44
1412.....	Ph. D.	20
326.....	J. D.	4
82.....	M. E.	10
66.....	Ph. M.	1
56.....	E. E.	8
55.....	M. B. A.	1
50.....	C. E.	10
22.....	Ch. E.	6
11.....	M. Educ.	1
5.....	M. Mus.	3
4.....	D. D.	1
2.....	J. S. D.	1
2.....	D. Oph.	1
1.....	Adv. V. M.	1
1.....	LL. D.	1
1.....	LL. M.	1

There is, perhaps, little in Table 14 to require special notice, except to call attention to the large enrollment in evening classes, extension classes, and correspondence study, as compared with the total regular day enrollment. The part-time work has grown rapidly in recent years and is here shown to reach nearly one-half the number enrolled in regular college work.

While Standard No. 10 does not specify the minimum percentage of students allowable in the third and fourth years, it seems very clear that any institution which does not have at least 25% of its

enrollment in the junior and senior classes will bear some inspection.

Attention is called to Tables 16 and 17 in this connection.

Standard No. 11. Libraries and Laboratories

The college shall have a live, well-distributed, professionally administered library of at least 8,000 volumes exclusive of public documents, bearing specifically upon the subjects taught and with a definite annual appropriation for the purchase of new books and current periodicals. It is urged that such appropriation be at least five dollars per student registered.

The college shall be provided with a laboratory equipment sufficient to develop fully and illustrate each course announced.

The figures presented in Tables 18 and 19 show that there is a great variation in the library and laboratory facilities which some institutions place before their students as compared with others.

In general, it seems that the number of books, the number of periodicals, and the amount expended on the library in the institutions found in the lowest quartile are very inadequate. The same is true of the laboratory situation. I hope that the Library Committee of the Association may be able to make some suggestions for modification of this standard.

To secure the percentages listed in Table 20, institutions were rated on a percentage basis both as to volumes per day student and as to expenditures for books and magazines per regular day student. In the first case 100% was taken as 47.9 volumes per student, the median for the Association; and in the

second case as \$5.00 per student, the amount mentioned in the standard. As the median expenditure per student for the Association was \$4.97, practically the

same result would have been secured by the use of this figure instead. The average of the two resulting percentages determined the ratings in Table 20.

Table 14. Summary of Enrollment in Colleges and Universities,
First Semester, 1927-28

	Men	No. of Insti- tutions	Women	No. of Insti- tutions	Total	No. of Insti- tutions
1. Regular day-school enrollment						
a. Graduate School	6,946	62	4,120	61	11,066	68
b. Arts and Sciences	66,260	139	52,303	145	118,563	156
c. Engineering	23,491	45	142	25	23,633	45
d. Agriculture	5,265	22	1,503	17	6,768	22
e. Commerce	8,966	35	1,323	34	10,289	36
f. Law	5,946	34	192	28	6,138	34
g. Medicine	7,716	24	399	23	8,115	28
h. Dentistry	3,616	15	63	11	3,679	15
i. Theology	846	12	119	6	965	12
j. Teacher Training	2,897	37	8,786	38	11,683	40
k. Music	597	49	3,063	61	3,660	63
l. Art	87	9	484	15	571	16
m. Short Courses	595	8	473	9	1,068	13
n. Other Courses	5,723	43	9,282	48	15,005	52
Total	138,951	144	82,252	150	221,203	163
Total (excluding duplicates).....					214,633	163
2. Special students included			4,431	students in 132	institutions	
3. Summer session			82,642	students in 108	institutions	
4. Part time enrollment:						
a. Evening			36,826	students in 42	institutions	
b. Extension			18,852	students in 42	institutions	
c. Correspondence			37,436	students in 33	institutions	
d. Other			5,287	students in 61	institutions	
e. Total			98,118	students in 104	institutions	
5. Elementary and Secondary Students:						
a. Academy or High School.....			9,326	students in 45	institutions	
b. Training School			2,705	students in 17	institutions	
c. Sub-Freshmen			92	students in 6	institutions	
d. Other Secondary			2,610	students in 17	institutions	
Total			14,733	students in 58	institutions	

Table 15. Summary of College and Universities Enrollment by Institutions, First Semester, 1927-28

	Total Full Time Day School	Summer School- 1927	Evening Session	Extension Classes	Corres- pondence Work
Akron	1,118	416	1,086	.....	.....
Albion	771	.....	.....	.....	.....
Alma	269	.....	.....	21	.....
Antioch	689	.....	.....	.....	.....
Arizona	1,719	380	56	24	304
Arkansas	1,420	783	.....	650	1,204
Armour	821	164	.....	.....	.....
Augustana	768	127	.....	.....	.....
Baker	451	76	.....	.....	.....
Baldwin-Wallace	406	56	.....	.....	.....
Battle Creek	596	214	10	7	.....
Beloit	536	.....	.....	.....	.....
Bethany	322	.....	.....	.....	.....
Bradley	715	290	122	25	69
Butler	1,659	574	763	145	.....
Capital	470	57	.....	.....	.....
Carleton	824	.....	.....	.....	.....
Carroll	368	.....	.....	.....	.....
Carthage	246	42	.....	.....	.....
Case	613	170	.....	.....	.....
Central	603	210	.....	.....	.....
Chicago	5,718	6,474	2,310	.....	7,405
Cincinnati	4,309	1,170	4,295	715	.....
Coe	741	248	125	.....	.....
Colorado Agric.	1,121	575	.....	.....	.....
Colorado College	564	.....	.....	.....	.....
Colorado, Univ. of	2,913	3,360	.....	532	1,850
Columbia	308	253	56	.....	.....
Concordia	401	.....	.....	.....	.....
Cornell	536	52	.....	.....	.....
Creighton	1,319	589	178	.....	.....
Culver-Stockton	248	189	.....	.....	.....
Dakota Wesleyan	292	113	.....	.....	2
Denison	872	144	.....	.....	.....
Denver	1,618	838	472	549	.....
De Paul	1,124	1,165	1,808	456	33
De Pauw	1,619	210	.....	93	.....
Detroit	1,801	433	2,759	.....	.....
Doane	217	.....	.....	.....	.....
Drake	1,287	626	236	.....	.....
Drury	458	.....	.....	.....	.....
Dubuque	180	95	30	.....	.....
Earlham	461	.....	.....	.....	.....
Emporia	337	.....	.....	.....	.....
Eureka	228	.....	.....	.....	.....
Franklin	283	99	.....	206	.....
Grinnell	745	.....	.....	.....	.....
Gustavus-Adolphus	493	.....	.....	.....	.....
Hamline	393	.....	.....	.....	.....

Table 15 (Continued). Summary of College and Universities Enrollment by Institutions, First Semester, 1927-28

	Total Full Time Day School	Summer School- 1927	Evening Session	Extension Classes	Corres- pondence Work
Hanover	225	203	.....	370	.....
Hastings	515	195	.....	.....	12
Heidelberg	440	.....	.....	.....	.....
Hendrix	302	49	.....	.....	.....
Hillsdale	377	.....	.....	.....	.....
Hiram	297	.....	.....	.....	.....
Hope	498	.....	.....	.....	.....
Huron	278	114	.....	.....	.....
Illinois College	391	.....	.....	.....	.....
Illinois, Univ. of	12,033	2,254	.....	.....	.....
Illinois Wesleyan	647	.....	.....	134	.....
Illinois Woman's College	324	.....	.....	.....	.....
Indiana	4,166	1,919	.....	5,248	2,715
Iowa St. College of Agric.	3,851	1,466	.....	.....	.....
Iowa St. Univ. of	5,350	3,085	190	.....	899
Iowa Wesleyan	331	79	8	.....	.....
James Milliken	558	.....	16	8	.....
Jamestown	376	134	.....	.....	.....
John Carroll	305	234	162	.....	.....
Kalamazoo	369	.....	.....	.....	.....
Kansas St. Agric.	2,876	937	.....	12	1,030
Kansas Univ. of	4,091	1,680	.....	368	826
Kenyon	260	.....	.....	.....	.....
Knox	642	.....	.....	.....	.....
Lake Erie	214	.....	.....	.....	.....
Lake Forest	386	.....	.....	60	.....
Lawrence	1,070	.....	.....	.....	.....
Lewis	969	575	1,562	61	.....
Lindenwood	449	.....	.....	.....	.....
Loretto	112	113	20	.....	.....
Loyola	2,124	846	978	941	864
Luther	343	.....	.....	.....	.....
Macalester	465	.....	.....	.....	.....
Marietta	359	.....	.....	.....	.....
Marquette	2,818	706	630	.....	.....
Marygrove	304	.....	.....	.....	.....
Miami	1,692	644	.....	343	.....
Michigan St. College of Agric.	2,828	575	12	89	20
Michigan, Univ. of	10,200	3,322	.....	1,146	.....
Milwaukee-Downer	402	.....	.....	.....	.....
Minnesota	11,519	5,444	4,522	.....	1,901
Missouri, Univ. of	4,000	1,649	.....	865	1,750
Missouri Valley	222	.....	.....	.....	.....
Monmouth	471	78	.....	.....	.....
Montana St. College	906	.....	.....	.....	.....
Montana, Univ. of	1,362	472	.....	.....	240
Morningside	756	279	75	.....	.....
Mount St. Joseph	201	272	.....	.....	.....
Mount Union	516	160	.....	.....	.....

Table 15 (Continued). Summary of College and Universities Enrollment by Institutions, First Semester, 1927-28

	Total Full Time Day School	Summer School- 1927	Evening Session	Extension Classes	Corres- pondence Work
Muskingum	827	979	.....	120	.....
Nebraska, Univ. of	6,340	3,401	362	15	1,550
Nebraska Wesleyan	736	242	.....	.....	2
New Mexico College of Agric.....	268	94	.....	.....	.....
New Mexico, St. Univ. of.....	528	335	71	28	13
North Central	507	.....	.....	.....	.....
North Dakota Agric.	1,093	188	.....	.....	522
North Dakota, Univ. of	1,604	461	.....	43	394
Northwestern	5,530	1,988	4,166	.....	.....
Notre Dame	2,870	915	.....	.....	.....
Oberlin	1,767	220	.....	.....	.....
Ohio State Univ.	10,183	3,080	.....	.....	.....
Ohio University	1,074	1,215	.....	747	624
Ohio Wesleyan	1,848	.....	.....	.....	.....
Oklahoma Agric. & Mech.....	2,951	1,532	.....	.....	1,199
Oklahoma College for Women.....	728	.....	.....	13	.....
Oklahoma, University of	4,898	2,220	.....	720	1,645
Ottawa	324	105	.....	.....	.....
Otterbein	445	.....	.....	.....	.....
Quachita	304	.....	.....	.....	.....
Park	510	.....	.....	.....	.....
Parsons	430	182	.....	.....	125
Penn	301	103	.....	.....	.....
Phillips	558	309	.....	.....	.....
Purdue	3,647	433	.....	104	12
Rockford	400	.....	150	.....	.....
Rosary	256	245	.....	.....	.....
Rose Polytechnic	254	.....	.....	.....	.....
St. Ambrose	161	.....	41	4	.....
St. Benedict's	188	230	.....	.....	.....
St. Catharine	315	120	.....	.....	.....
St. Louis	1,786	611	678	65	.....
St. Mary's—Notre Dame	345	184	.....	.....	.....
St. Mary's—Prairie du Chien.....	155	113	.....	.....	.....
St. Mary's—St. Mary's	176	.....	.....	.....	.....
St. Mary-of-the-Woods	266	952	.....	.....	.....
St. Olaf	985	.....	.....	.....	.....
St. Teresa	336	273	.....	.....	.....
St. Thomas	468	248	251	.....	.....
St. Xavier	389	390	485	.....	45
Shurtleff	232	69	.....	.....	.....
Simpson	652	147	.....	.....	.....
S. Dakota St. School of Mines.....	295	.....	.....	.....	.....
S. Dakota St. College of Agric.....	885	165	.....	.....	.....
S. Dakota, Univ. of.....	893	224	.....	.....	151
Southwestern	737	510	.....	40	.....
Toledo	825	243	809	.....	.....
Wabash	385	.....	.....	.....	.....
Washburn	864	264	169	43	43

Table 15 (Continued). Summary of College and Universities Enrollment by Institutions, First Semester, 1927-28

	Total Full Time Day School	Summer School- 1927	Evening Session	Extension Classes	Corres- pondence Work
Washington	3,385	920	2,635	96	.....
Webster	157	.....	.....	.....	.....
W. Virginia Collegiate.....	477	302	.....	43	.....
W. Virginia Univ.	2,575	1,240	25	.....	.....
W. Virginia Wesleyan	344	226	33	.....	.....
Western College for Women.....	385	.....	.....	.....	.....
Western Reserve	3,385	1,932	4,164	.....	.....
Westminister	313	.....	.....	.....	.....
Wheaton	462	177	.....	.....	223
Wichita	739	283	226	13	.....
William Jewell	519	121	.....	.....	.....
Wisconsin	5,942	5,165	.....	3,030	9,230
Wittenberg	1,047	649	80	660	.....
Wooster	852	108	.....	.....	.....
Wyoming	1,040	771	.....	.....	534
Yankton	332	82	.....	.....	.....
Total	214,633	82,642	36,826	18,852	37,436

Table 16. Percentage of Classified Undergraduate Enrollment in the Senior College and in the Junior College Divisions for Year of Report and Three Preceding Years (Standard No. 10)

	1927-28 (First Semester Only)					1926-27 (Both Semesters)					1925-26 (Both Semesters)					1924-25 (Both Semesters)					Average for Four Years	
	Enrol. in 4 Yrs.	Jun. Sen.	% Fr. & Soph.	% Jr. & Sr.	% Fr. & Soph. & Jr. & Sr.	Enrol. in 4 Yrs.	Jun. Sen.	% Fr. & Soph.	% Jr. & Sr.	% Fr. & Soph. & Jr. & Sr.	Enrol. in 4 Yrs.	Jun. Sen.	% Fr. & Soph.	% Jr. & Sr.	% Fr. & Soph. & Jr. & Sr.	Enrol. in 4 Yrs.	Jun. Sen.	% Fr. & Soph.	% Jr. & Sr.	% Fr. & Soph. & Jr. & Sr.	Average for Four Years	% Fr. & Soph. & Jr. & Sr.
Akron	1,083	364	33.6	719	66.4	1,108	337	30.4	771	69.6	1,015	323	31.8	692	68.1	942	312	33.1	630	66.9	32.2	32.2
Albion	751	250	33.2	501	66.8	680	233	34.3	447	65.7	645	225	34.9	420	65.1	652	225	34.5	427	65.5	34.2	34.2
Alma	269	85	31.6	184	68.4	281	87	31	194	69	290	93	32	197	68	531	107	33.9	196	64.7	32.5	32.5
Antioch	680	283	41.6	397	58.4	656	281	42.8	375	57.2	588	226	38.4	362	61.6	531	180	33.9	351	66.1	39.2	39.2
Arizona	1,547	658	42.5	889	57.5	1,622	511	31.5	1,111	68.5	1,421	566	39.8	855	60.2	1,268	561	44.2	707	55.8	39.5	39.5
Arkansas	1,410	479	33.9	931	66.1	1,574	497	31.5	1,077	68.4	1,519	418	27.6	1,100	72.4	1,388	359	25.9	1,029	74.1	29.7	29.7
Armour	816	311	38.1	505	61.9	830	331	39.9	499	60.1	787	308	39.1	479	60.9	759	291	38.3	468	61.7	38.9	38.9
Augustana	346	125	36.1	221	63.9	408	150	36.8	258	63.2	370	132	35.7	238	64.3	361	118	32.7	243	67.3	35.3	35.3
Baker	465	190	40.9	275	59.1	435	189	43.4	246	56.6	523	182	34.8	341	65.2	507	194	38.3	313	61.7	39.4	39.4
Baldwin-Wallace	372	131	35.2	241	64.8	373	147	39.4	226	60.6	324	126	38.9	198	61.1	310	107	34.5	203	65.5	37.0	37.0
Battle Creek	553	176	31.5	382	68.5	576	174	30.2	402	69.8	424	115	27.1	309	72.9	488	162	33.2	326	66.8	29.6	29.6
Beloit	534	160	29.9	374	70.1	501	147	29.3	354	70.7	572	168	29.4	404	70.6	528	162	30.7	366	69.3	30.6	30.6
Bethany	318	92	28.8	226	71.1	326	103	31.6	223	68.4	301	99	32.9	202	67.1	284	87	30.6	197	69.4	31.0	31.0
Bradley	685	195	28.4	490	71.6	678	190	28	488	72	670	154	23	516	77	630	156	24.8	474	75.2	26.1	26.1
Butler	1,610	470	29.1	1,140	70.9	1,620	414	25.6	1,206	74.4	1,610	477	29.6	1,133	70.4	1,323	381	28.8	942	71.2	28.3	28.3
Capital	408	112	27.5	296	72.5	422	86	26.7	336	73.3	292	78	26.7	214	73.3	288	88	32.8	180	67.2	28.4	28.4
Carleton	811	263	32.4	548	67.6	829	301	36.3	528	63.7	861	318	36.8	546	63.2	876	299	34.1	577	65.9	34.9	34.9
Carroll	364	114	31.3	250	68.7	380	106	41	224	59	394	127	32.9	261	67.8	369	119	32.2	250	67.8	34.2	34.2
Carthage	237	76	32.1	161	67.9	294	103	35	191	65	612	239	39.1	373	60.9	376	139	37.2	284	62.8	33.3	33.3
Case	612	240	39.2	372	60.8	560	218	22.4	443	77.6	573	129	22.5	444	77.5	577	235	40.7	342	59.3	40.6	40.6
Central	596	150	25.1	446	74.9	571	128	22.4	443	77.6	3,963	1,920	48.4	2,043	51.6	3,660	1,748	47.8	1,912	52.2	48.5	48.5
Chicago	.....	.....	.....	.....	.....	4,039	2,033	50.3	2,006	49.7	2,818	940	33.4	1,878	66.6	2,668	900	33.7	1,768	66.3	34.8	34.8
Cincinnati	3,483	1,273	36.6	2,210	61.4	3,243	1,148	35.4	2,095	61.6	1,919	285	31	634	69	2,668	900	33.7	1,768	66.3	34.8	34.8
Coe	740	217	29.3	523	70.7	880	283	32.2	597	67.8	1,052	350	33.3	702	66.7	987	356	36	631	64	32.1	32.1
Colorado Agric.	1,017	307	30.2	710	69.8	1,072	310	29	762	71	584	207	35.4	377	64.6	667	203	30.4	464	69.6	34.8	34.8
Colorado College	552	216	39.1	336	60.9	583	201	34.4	382	65.6	2,360	610	25.9	1,750	74.1	2,337	639	27.3	1,698	72.7	26.7	26.7
Colorado, Univ.	2,355	626	26.7	1,729	73	2,488	658	26.4	1,830	73.6	315	95	30.2	220	69.8	281	94	33.4	187	66.5	29.6	29.6
Columbia	308	79	25.7	229	74.3	304	88	28.9	216	71.1	364	131	36.0	233	64.0	673	213	31.6	460	68.4	33.3	33.3
Concordia	531	158	29.8	373	70.2	407	133	32.7	274	67.3	672	240	35.7	432	64.3	1,226	487	39.7	739	60.3	40.4	40.4
Cornell	.....	.....	.....	.....	.....	1,387	552	39.8	835	60.2	1,360	509	37.4	851	62.6	1,226	487	39.7	739	60.3	40.4	40.4
Creighton	1,358	607	44.7	751	55.3	1,387	552	39.8	835	60.2	259	82	31.7	177	68.3	202	47	23.3	155	76.7	27.1	27.1
Dakota Agric.	234	54	23.1	180	76.9	240	73	30.4	167	69.6	321	91	28.3	230	71.7	380	93	30	217	70	29.4	29.4
Dakota Wesleyan	289	89	30.8	200	69.2	323	92	28.5	231	71.5	859	237	27.6	622	72.4	880	271	30.8	609	69.2	32.4	32.4
Denison	866	348	40.2	518	59.8	855	265	31.0	591	69.0	1,773	627	35.4	1,146	64.6	1,785	615	44.5	1,170	65.5	38.9	38.9
Denver	1,428	529	37.1	899	62.9	1,603	618	38.6	985	61.4	1,738	627	35.4	1,146	64.6	1,785	615	44.5	1,170	65.5	38.9	38.9
De Paul	1,031	293	28.4	738	71.6	861	259	30.1	602	69.9	738	208	28.2	530	71.8	613	161	26.3	452	73.7	28.3	28.3

Table 16 (Continued). Percentage of Classified Undergraduate Enrollment in the Senior College and in the Junior College Divisions for Year of Report and Three Preceding Years (Standard No. 10)

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1927-28 (First Semester Only)										1926-27					1925-26					1924-25					Average for 4 Years							
Enrol.	in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Jr. Enrol.	% Fresh. & Soph. Enrol.	% Fr. & Soph. Enrol.	Enrol.	in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Jr. Enrol.	% Fresh. & Soph. Enrol.	% Fr. & Soph. Enrol.	Enrol.	in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Jr. Enrol.	% Fresh. & Soph. Enrol.	% Fr. & Soph. Enrol.	Enrol.	in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Jr. Enrol.	% Fresh. & Soph. Enrol.	% Fr. & Soph. Enrol.	Enrol.	in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Jr. Enrol.	% Fresh. & Soph. Enrol.	% Fr. & Soph. Enrol.			
De Pauw	1,593	581	36.5	1,012	63.5	1,690	633	37.5	1,057	62.5	1,783	558	31.3	1,225	68.7	1,649	481	29.2	1,168	70.8	33.6	1,649	481	29.2	1,168	70.8	33.6	1,649	481	29.2	1,168	70.8
Detroit	1,680	355	21.2	1,325	78.8	1,809	303	16.7	1,506	83.2	1,596	274	17.2	1,322	82.8	1,473	202	13.7	1,271	86.3	17.2	1,473	202	13.7	1,271	86.3	17.2	1,473	202	13.7	1,271	86.3
Doane	215	70	32.6	145	67.4	232	80	34.5	152	65.5	198	57	28.8	141	71.2	183	46	25.1	137	74.8	30.3	183	46	25.1	137	74.8	30.3	183	46	25.1	137	74.8
Drake	1,124	305	27.1	819	72.9	1,247	300	24.1	947	75.9	1,265	294	23.2	971	76.8	1,194	275	23.1	919	77	24.4	1,194	275	23.1	919	77	24.4	1,194	275	23.1	919	77
Drury	439	147	33.5	292	66.5	440	144	32.7	296	67.3	441	150	34	291	66	425	137	32.2	288	67.8	33.1	425	137	32.2	288	67.8	33.1	425	137	32.2	288	67.8
Dubuque	169	58	34.3	111	65.7	161	64	39.8	97	60.2	161	59	36.7	102	63.3	192	60	31.3	132	68.7	35.5	192	60	31.3	132	68.7	35.5	192	60	31.3	132	68.7
Earlham	449	185	41.2	264	58.8	523	193	36.9	330	63.1	530	189	35.7	341	64.3	510	183	35.9	327	64.1	37.4	510	183	35.9	327	64.1	37.4	510	183	35.9	327	64.1
Emporia	337	129	38.3	208	61.7	441	149	33.8	292	66.2	439	139	31.7	300	68.3	409	138	33.7	271	66.3	34.4	409	138	33.7	271	66.3	34.4	409	138	33.7	271	66.3
Eureka	221	84	38.1	137	61.9	285	98	34.4	187	65.6	296	93	31.4	203	68.6	310	77	24.8	233	75.2	32.2	310	77	24.8	233	75.2	32.2	310	77	24.8	233	75.2
Franklin	281	89	31.7	192	68.3	365	121	33.2	244	66.8	452	150	33.2	302	66.8	410	122	29.8	288	70.2	32.0	410	122	29.8	288	70.2	32.0	410	122	29.8	288	70.2
Grinnell	728	242	33.2	486	66.8	736	258	35.1	478	64.9	758	267	35.2	491	64.3	748	275	36.8	473	63.2	35.1	748	275	36.8	473	63.2	35.1	748	275	36.8	473	63.2
Gutavus-Andolphus	488	203	41.6	285	58.4	454	166	36.6	288	63.4	636	174	27.4	462	72.6	567	172	30.3	395	69.6	28.8	567	172	30.3	395	69.6	28.8	567	172	30.3	395	69.6
Hamline	386	115	29.8	271	70.2	470	148	31.5	322	68.5	636	174	27.4	462	72.6	567	172	30.3	395	69.6	28.8	567	172	30.3	395	69.6	28.8	567	172	30.3	395	69.6
Hanover	225	74	32.9	151	67.1	309	78	25.2	231	74.8	281	80	28.5	201	71.5	322	82	25.5	240	74.5	28.0	322	82	25.5	240	74.5	28.0	322	82	25.5	240	74.5
Hastings	515	141	27.4	374	72.6	510	140	27.5	370	72.5	468	118	25.2	350	74.8	379	110	29.1	269	70.9	27.3	379	110	29.1	269	70.9	27.3	379	110	29.1	269	70.9
Heidelberg	426	157	36.8	269	63.2	411	155	37.7	256	62.3	397	160	40.3	237	59.7	368	130	35.3	238	64.7	37.5	368	130	35.3	238	64.7	37.5	368	130	35.3	238	64.7
Hendrix	299	107	35.8	192	64.2	311	110	35.4	201	64.6	363	117	32.2	246	67.8	345	107	31.0	238	69.0	33.6	345	107	31.0	238	69.0	33.6	345	107	31.0	238	69.0
Hillsdale	368	152	41.3	216	58.7	385	133	34.5	252	65.5	421	125	29.7	296	70.3	421	144	34.2	277	65.8	34.9	421	144	34.2	277	65.8	34.9	421	144	34.2	277	65.8
Hiram	282	106	37.6	176	62.4	347	121	34.9	226	65.1	357	115	32.2	242	67.8	362	126	34.8	236	65.2	34.9	362	126	34.8	236	65.2	34.9	362	126	34.8	236	65.2
Hope	497	189	38	308	62	513	201	39.2	312	60.8	502	194	38.6	308	61.4	487	199	40.9	288	59.1	39.2	487	199	40.9	288	59.1	39.2	487	199	40.9	288	59.1
Huron	275	76	27.7	199	72.3	308	87	28.2	221	71.8	316	89	28.2	227	71.8	259	67	25.9	192	74.1	27.5	259	67	25.9	192	74.1	27.5	259	67	25.9	192	74.1
Illinois College	373	119	31.9	254	68.1	394	128	32.5	266	67.5	378	99	26.2	279	73.8	348	84	24.1	264	75.9	28.7	348	84	24.1	264	75.9	28.7	348	84	24.1	264	75.9
Illinois, Univ. of	9,350	3,345	35.7	6,005	64.3	9,933	3,859	38.9	6,074	61.1	9,456	3,050	32.2	6,406	67.8	8,513	2,967	34.9	5,546	65.1	35.4	8,513	2,967	34.9	5,546	65.1	35.4	8,513	2,967	34.9	5,546	65.1
Illinois Wesleyan	615	175	28.5	440	71.5	700	197	28.1	503	71.9	617	166	26.9	451	73.1	561	155	27.7	406	72.3	27.8	561	155	27.7	406	72.3	27.8	561	155	27.7	406	72.3
Illinois Woman's	324	102	31.5	222	68.5	317	87	27.4	230	72.6	302	71	23.5	231	76.5	259	61	23.6	198	76.4	26.5	259	61	23.6	198	76.4	26.5	259	61	23.6	198	76.4
Iowa St. College	3,534	1,031	29.1	2,503	70.9	3,810	1,377	36.1	2,433	63.9	3,618	1,304	36	2,314	64	3,573	1,100	30.8	2,473	69.1	33.0	3,573	1,100	30.8	2,473	69.1	33.0	3,573	1,100	30.8	2,473	69.1
Iowa, St. Univ.	4,957	1,802	36.3	3,155	63.7	4,942	1,854	37.5	3,088	62.5	4,847	1,949	40.2	2,898	59.8	4,859	1,921	39.5	2,938	60.5	38.4	4,859	1,921	39.5	2,938	60.5	38.4	4,859	1,921	39.5	2,938	60.5
Iowa Wesleyan	318	94	29.5	224	70.5	342	104	30.4	238	69.6	367	107	29.2	260	70.8	374	115	30.7	259	69.3	30.0	374	115	30.7	259	69.3	30.0	374	115	30.7	259	69.3
James Milliken	545	149	27.3	396	72.7	538	155	28.8	383	71.2	520	169	32.5	351	67.5	534	165	30.9	369	69.1	29.9	534	165	30.9	369	69.1	29.9	534	165	30.9	369	69.1
Jamestown	368	111	30.2	257	69.8	287	82	28.6	205	71.4	287	94	32.8	193	67.2	240	74	30.8	166	69.1	30.6	240	74	30.8	166	69.1	30.6	240	74	30.8	166	69.1
John Carroll	305	93	30.5	212	69.5	335	103	30.7	232	69.3	340	92	27.1	248	72.9	333	84	25.2	249	74.8	28.4	333	84	25.2	249	74.8	28.4	333	84	25.2	249	74.8
Kalamazoo	347	121	34.9	226	65.1	358	136	38	222	62	371	135	36.4	236	63.6	367	127	34.6	240	65.4	36.0	367	127	34.6	240	65.4	36.0	367	127	34.6	240	65.4
Kansas St. Agric.	2,700	951	35.2	1,749	64.8	3,016	897	29.7	2,119	70.3	3,075	856	27.8	2,219	72.2	2,884	814	28.2	2,070	71.8	30.2	2,884	814	28.2	2,070	71.8	30.2	2,884	814	28.2	2,070	71.8
Kansas, Univ.	4,069	1,478	36.4	2,591	63.6	4,130	1,812	43.9	2,318	56.1	4,145	1,593	38.4	2,552	61.6	3,754	1,397	37.2	2,357	62.8	39.0	3,754	1,397	37.2	2,357	62.8	39.0	3,754	1,397	37.2	2,357	62.8
Kenyon	252	91	36.1	161	63.9	257	76	29.6	181	70.4	258	74	28.7	184	71.3	250	73	29.2	177	70.8	30.9	250	73	29.2	177	70.8	30.9	250	73	29.2	177	70.8

Table 16 (Continued). Percentage of Classified Undergraduate Enrollment in the Senior College and in the Junior College Divisions for Year of Report and Three Preceding Years (Standard No. 10)

	1927-28 (First Semester Only)				1926-27				1925-26				1924-25				Average %	Total %			
	Enrol. in 4 Yrs.	Jun. & Sen.	% Fr. & Soph.	Fresh. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen.	% Fr. & Soph.	Fresh. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen.	% Fr. & Soph.	Fresh. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen.	% Fr. & Soph.	Fresh. Enrol.					
Knox	617	209	33.9	408	66.1	609	196	32.2	413	67.8	612	201	32.8	411	67.2	613	211	34.4	402	65.6	33.3
Lake Erie	214	67	31.3	147	68.7	201	56	27.9	145	72.1	201	63	31.3	138	68.7	189	52	27.5	137	72.5	29.5
Lake Forest	372	102	27.4	270	72.6	321	79	24.6	242	75.4	258	60	23.3	198	76.7	223	68	30.5	155	69.5	26.5
Lawrence	638	223	34.9	415	65.1	737	238	32.3	499	67.7	624	248	30.5	564	69.5	827	290	35	537	65	33.2
Lewis	726	188	25.9	538	74.1	825	225	27.3	600	72.7	690	190	27.5	500	72.5	725	225	31.1	500	68.9	28.0
Lindenwood	447	80	17.9	367	82.1	458	72	15.7	386	84.3	445	53	12	392	88	408	49	12	359	88	14.4
Loretto Heights	112	34	30.4	78	69.6	124	31	25	93	75	100	28	28	72	72	50	15	30	35	70	52.1
Loyola	2,800	1,684	60.1	1,116	39.9	2,833	1,468	51.8	1,365	48.2	2,924	1,458	49.9	1,466	50.1	2,818	1,309	46.5	1,509	53.5	28.4
Luther	340	133	39.1	207	60.9	341	134	39.3	207	60.7	305	126	41.3	179	58.7	309	104	33.7	205	66.3	38.4
Macalester	465	148	31.8	317	68.2	520	163	31.3	357	68.7	522	191	36.6	331	63.4	523	180	34.4	343	65.6	33.5
Marietta	352	119	33.8	233	66.2	362	140	38.7	222	61.3	337	118	35	219	65	339	106	31.3	233	68.7	34.7
Marquette	2,214	912	41.2	1,302	58.8	2,408	1,064	44.2	1,344	55.8	2,339	974	41.6	1,365	58.4	2,283	964	42.2	1,319	57.8	42.3
Marygrove	304	70	23	234	77	142	30	21.1	112	78.9	125	28	22.4	97	77.6	115	31	27	84	73	23.4
Michigan	1,643	462	28.1	1,181	71.9	1,710	460	26.9	1,250	73.1	1,675	439	26.2	1,232	73.8	1,644	389	23.7	1,255	76.3	26.2
Mich. St. Coll.	2,637	899	34.1	1,738	65.9	2,478	844	34	1,634	66	2,302	770	33.4	1,532	66.6	1,895	707	37.3	1,188	62.7	34.7
Milwaukee-Downer	406	102	25.1	304	74.9	389	103	26.5	286	73.5	364	92	25.3	272	74.7	295	85	28.8	210	71.2	26.4
Minnesota	9,207	3,187	34.6	6,020	65.4	7,110	3,693	52	3,417	48	9,294	3,461	37.2	5,833	62.8	8,719	3,505	40.2	5,214	59.8	41.0
Missouri, Univ.	3,591	1,624	45.2	1,967	54.8	3,826	1,640	42.9	2,186	57.1	3,601	1,486	41.3	2,115	58.7	3,465	1,442	41.6	2,023	58.4	42.8
of	.....	.....	.....	.....	.....	298	98	32.9	200	67.1	.....	.....	.....	.....	.....	332	116	34.9	216	65.1	32.8
Missouri Valley	.....	.....	.....	.....	.....	485	168	34.6	317	65.4	.....	.....	.....	.....	.....	385	137	35.6	248	64.4	35.3
Monmouth	468	167	35.7	301	64.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana St. Col-lege	887	317	35.7	570	64.3	906	297	32.8	609	67.2	889	258	29.0	631	71.0	784	260	33.2	524	66.8	32.7
Montana St., Univ.	.....	.....	.....	.....	.....	1,310	435	33.3	875	66.7	1,253	418	33.4	835	66.6	1,131	390	34.5	741	65.5	33.9
of	1,321	452	34.2	869	65.8	623	176	28.3	447	71.7	590	172	29.2	418	70.8	561	166	29.6	395	70.4	28.2
Morningside	612	156	25.5	456	74.5	213	66	31	147	69	208	50	24	158	76	187	46	24.6	141	75.4	27.6
Mount St. Joseph	191	59	30.9	132	69.1	505	184	36.4	321	63.6	474	159	33.5	315	66.5	443	149	33.6	294	66.4	35.0
Mount Union	503	184	36.6	319	63.4	888	321	36.1	567	63.9	876	294	33.6	582	66.4	842	260	30.9	582	69.1	34.0
Muskingum	828	294	35.5	534	64.5	.....	.....	.....	.....	.....	8,529	3,264	38.3	5,265	61.7	8,042	2,879	35.8	5,163	64.2	39.1
Nebraska, Univ.	6,048	2,579	42.6	3,469	57.4	8,696	3,442	39.6	5,254	60.4	.....	.....	.....	.....	.....	650	160	24.6	490	75.4	25.8
of	.....	.....	.....	.....	.....	711	186	26.2	525	73.8	653	179	27.4	474	72.6	.....	.....	.....	.....	.....	.....
Nebraska Wesleyan	736	183	24.9	553	75.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico Col-lege	245	83	33.9	162	66.1	239	82	34.3	157	65.7	265	90	34	175	66	223	74	33.2	149	66.8	33.9
of Agric.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table 16 (Continued). Percentage of Classified Undergraduate Enrollment in the Senior College and in the Junior College Divisions for Year of Report and Three Preceding Years (Standard No. 10)

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Table 16 (Continued). Percentage of Classified Undergraduate Enrollment in the Senior College and in the Junior College Divisions for Year of Report and Three Preceding Years (Standard No. 10)

	1927-28 (First Semester Only)					1926-27					1925-26					1924-25					Average for the Four Years
	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Jr. & Sr.	Fresh. & Soph. Enrol.	% Fr. & So.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Jr. & Sr.	Fresh. & Soph. Enrol.	% Fr. & So.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Jr. & Sr.	Fresh. & Soph. Enrol.	% Fr. & So.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Jr. & Sr.	Fresh. & Soph. Enrol.	% Fr. & So.	
Wisconsin	7,914	3,011	38	4,903	62	7,308	2,916	39.9	4,392	60.1	6,797	2,834	41.7	3,963	58.3	6,743	2,771	41.1	3,972	58.9	40.2
Wittenberg	919	254	27.6	665	72.4	943	269	28.5	674	71.5	812	233	30	589	70	800	254	31.8	546	68.2	27.5
Wooster	848	315	37.1	533	62.9	921	332	36.0	589	64.0	896	341	38.1	555	61.9	866	326	37.6	540	62.4	37.2
Wyoming	941	270	28.7	671	71.3	949	255	26.9	694	73.1	831	235	28.3	596	71.7	673	184	27.3	489	72.7	27.8
Yankton	307	93	30.3	214	69.7	290	96	33.1	194	66.9	780	70	25	210	75	248	58	23.4	190	76.6	28.0
Total	176,820	62,307	35.2	114,513	64.8	184,969	67,221	36.4	117,748	63.6	180,819	62,948	34.8	117,871	65.2	170,944	59,747	34.9	111,197	65.1	.....
Average	1,119	394	35.2	725	61.8	1,149	418	36.4	731	63.6	1,130	393	34.8	737	65.2	1,068	373	34.9	695	65.1	.....
Highest	.....	.....	60.1	.....	84.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Median	.....	.....	32.9	.....	67.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowest	.....	.....	15.1	.....	39.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

Table 17. Percentage of Juniors and Seniors—Twenty Lowest Institutions Based on Four-Year Average (Standard No. 10).

1. Colorado University	26.7
2. Illinois Woman's	26.5
3. Lake Forest	26.5
4. Milwaukee-Downer	26.4
5. West Virginia Collegiate	26.2
6. Miami	26.2
7. Bradley	26.1
8. Nebraska Wesleyan	25.8
9. Drake	24.4
10. Marygrove	23.4
11. Central	23.4
12. Oklahoma Agric.	22.1
13. St. Benedict's	21.2
14. St. Mary's, Prairie du Chien	21.0
15. St. Mary's, St. Mary's	20.3
16. St. Ambrose	19.9
17. Oklahoma College for Women	19.6
18. Toledo, City of	18.1
19. Detroit, City of	17.2
20. Lindenwood	14.4

Standard No. 12. Finances

The college, if a corporate institution, shall have a minimum annual income of \$50,000 for its educational pro-

gram, one-half of which shall be from sources other than payments by students, and an additional annual income of \$5,000, one-half of which shall be from sources other than payments by students for each 100 students above 200. Such college, if not tax-supported, shall possess a productive endowment of \$500,000 and an additional endowment of \$50,000 for each additional 100 students above 200. Income from permanent and officially authorized educational appropriations of churches and church boards or duly recognized corporations or associations shall be credited to the extent actually received as 5% income toward the endowment requirement, but to an amount not exceeding the average annual income from such appropriation in the preceding five years, provided, however, that this shall not apply to more than the amount required in excess of \$300,000; and provided, further, that colleges electing to qualify under this interpretation be subject to annual review for accrediting.

Table 18. Libraries and Laboratories, Colleges and Universities—General Summary (Standard No. 11)

	Number of Institutions Included	Median	Median of Highest ¼	Median of Lowest ¼
Number of volumes in library excluding public documents	163	27,500	113,906	13,886
Volumes per regular day student, excluding public documents	163	47.9	93.8	25.0
Number of current periodicals received regularly exclusive of public documents.....	159	150	731	72
Amount appropriated for books and magazines in current academic (or calendar) year (1927 or 1927-28).....	153	\$ 3,000.00	\$18,000.00	\$ 1,250.00
Amount actually spent for books and magazines in preceding year	159	2,643.00	13,250.00	1,198.00
Amount per regular day student	159	4.97	9.24	2.62
Estimated replacement value of laboratory apparatus and equipment	147	38,321.00	150,136.00	12,450.00
Amount per regular day student.....	147	61.97	134.01	29.70
Amount budgeted for laboratory equipment and supplies (1927 or 1927-28)	134	4,136.00	24,240.00	1,629.00

Table 19. Libraries and Laboratories—Significant Facts in Detail
(Standard No. 11)

	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expenditures for Books and Magazines 1926-27	Per Capita Expend- itures (Reg. Day Student) 1926-27	Laboratory Replacement Value	Lab. Replace- ment Value Per Day Student 1926-27
Akron	26,212	21.1	\$ 5,079.00	\$ 4.09	\$111,532.00	\$ 89.87
Albion	31,140	45.5	2,875.00	4.20	36,391.00	53.20
Alma	35,688	122.6	1,933.00	6.64	22,000.00	75.60
Antioch	24,000	33.3	6,000.00	8.33	23,500.00	32.64
Arizona	65,000	37.7	9,160.00	5.31	545,610.00	316.30
Arkansas	67,000	43.4	27,000.00	17.49	63,319.00	41.04
Armour	32,440	39.1	2,848.00	3.43	396,026.27	477.14
Augustana	38,143	93.5	2,372.00	5.81	1,600.00	3.92
Baker	41,821	95.7	1,907.00	4.36	31,443.27	71.95
Baldwin-Wallace	33,000	87.3	2,242.00	5.93	40,000.00	105.82
Battle Creek	14,570	24.7	2,893.00	4.90	53,500.00	90.68
Beloit	65,135	129.5	3,000.00	5.96	50,000.00	99.40
Bethany	20,000	59.9	2,541.00	7.61	40,468.45	121.16
Bradley	21,103	30.7	1,897.00	2.76	38,858.00	56.48
Butler	28,045	16.6	7,482.00	4.44	50,100.00	29.70
Capital	12,000	31.7	1,885.00	4.97	12,750.00	33.64
Carleton	79,000	94.6	8,525.00	10.21	60,000.00	71.86
Carroll	16,500	42.1	958.00	2.44	19,499.00	49.74
Carthage	16,869	57.2	1,370.00	4.64	22,500.00	76.27
Case	22,000	38.7	.....	.....	.....	.....
Central	28,847	50.5	3,050.00	5.34	71,000.00	124.34
Chicago	768,559	91.9	84,510.00	10.11	.....	.....
Cincinnati	136,690	37.6	11,722.00	3.22	.....	.....
Coe	25,148	28.5	6,033.00	6.84	44,866.00	50.87
Colorado Agric.	57,626	48.5	2,390.00	2.01	118,212.00	99.59
Colorado College	90,000	151.5	4,540.00	7.64	62,500.00	105.22
Colorado Univ.	168,000	63.8	23,582.00	8.96	260,700.00	99.05
Columbia	26,412	81.3	5,525.00	17.00	19,000.00	58.46
Concordia	18,000	44.2	2,732.00	6.71	11,780.00	28.94
Cornell	58,504	97.5	1,761.00	2.94	43,400.00	72.33
Creighton	37,000	25	5,000.00	3.38	42,000.00	28.38
Culver-Stockton	18,889	73.2	2,000.00	7.75	18,000.00	69.77
Dakota Wesleyan	20,200	60.3	1,205.00	3.60	17,555.18	52.40
Denison	80,000	91.8	4,000.00	4.59	152,500.00	175.09
Denver	40,000	23.8	5,697.00	3.39	2,500.00	1.49
De Paul	15,237	16.1	1,919.00	2.03	25,000.00	26.48
De Pauw	49,802	29.4	4,245.00	2.51	36,000.00	21.26
Detroit	21,112	11.2	4,250.00	2.25	117,500.00	62.33
Doane	19,300	83.2	1,196.00	5.16	19,000.00	81.90
Drake	48,248	34.9	7,700.00	5.57	41,068.21	29.72
Drury	43,962	94.5	1,822.00	3.92	38,000.00	81.72
Dubuque	12,600	69.2	617.00	3.39	10,597.81	58.23
Earlham	34,536	66	3,180.00	6.08	40,000.00	76.48
Emporia	18,000	39.6	2,236.00	4.93	27,000.00	59.47
Eureka	17,579	59.6	2,330.00	7.90	28,500.00	96.61

Table 19 (Continued). Libraries and Laboratories—Significant Facts in Detail (Standard No. 11)

	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expenditures for Books and Magazines 1926-27	Per Capita Expend- itures (Reg. Day Student) 1926-27	Laboratory Replacement Value	Lab. Replace- ment Value Per Day Student 1926-27
Franklin	30,000	82.0	2,494.00	6.81	23,000.00	62.84
Grinnell	81,061	107.4	3,240.00	4.29	35,500.00	47.02
Gustavus-Adolphus	16,500	35.9	1,010.00	2.19	10,000.00	21.74
Hamline	27,500	58.1	3,686.00	7.79	.....	.....
Hanover	14,165	45.8	600.00	1.94	16,700.00	54.05
Hastings	12,000	23.5	730.00	1.43	16,393.90	32.14
Heidelberg	22,000	53.5	2,091.00	5.09	9,200.00	22.38
Hendrix	14,014	44.8	1,787.00	5.71	21,000.00	67.09
Hillsdale	30,000	76.1	968.00	2.46	41,900.00	106.35
Hiram	20,000	57.6	2,075.00	5.98	8,931.00	25.74
Hope	25,000	48.7	.....	.....	39,500.00	77.00
Huron	14,625	47.0	1,500.00	4.82	10,800.00	34.73
Illinois College	26,000	66.0	2,022.00	5.13	25,200.00	63.96
Illinois, Univ. of.....	708,850	51.6	109,512.00	7.98	418,012.00	30.44
Illinois Wesleyan	22,200	31.7	3,776.00	5.39	35,300.00	50.43
Illinois Woman's	14,923	47.1	1,904.00	6.01	12,225.50	38.57
Indiana	187,384	41.3	19,020.00	4.19	258,000.00	56.87
Iowa St. College of Ag.	145,000	34.0	44,802.00	10.49	218,000.00	51.07
Iowa, St. Univ.	263,244	47.9	48,065.00	8.75	3,343,929.00	608.43
Iowa Wesleyan	15,207	43.9	1,221.00	3.53	15,000.00	43.35
James Milliken	21,850	40.6	4,000.00	7.43	64,582.00	120.04
Jamestown	9,800	29.5	1,668.00	5.02	44,490.06	134.01
John Carroll	35,000	104.2	2,625.00	7.81	92,500.00	275.30
Kalamazoo	20,000	52.5	2,662.00	6.99	15,700.00	41.21
Kansas St. Agric.	84,660	26.5	7,700.00	2.41	198,558.00	62.15
Kansas, Univ.	180,000	40.6	26,993.00	6.09	.....	.....
Kenyon	27,000	104.2	1,733.00	6.69	87,000.00	335.91
Knox	30,000	47.5	2,850.00	4.51	20,232.26	32.01
Lake Erie	20,145	100.2	1,833.00	9.12	15,380.31	76.52
Lake Forest	38,307	118.2	2,647.00	8.17	.....	.....
Lawrence	42,486	57.2	3,266.00	4.40	43,555.85	58.62
Lewis	25,000	30.3	2,179.00	2.64	110,000.00	133.33
Lindenwood	10,630	23.2	2,391.00	5.22	40,000.00	87.34
Loretto Heights	8,188	66.0	700.00	5.65	7,975.00	64.31
Loyola	45,000	13.9	1,888.00	58	115,000.00	35.41
Luther	33,772	97.6	2,454.00	7.09	17,700.00	51.16
Macalester	16,800	32.3	1,724.00	3.32	21,192.42	40.75
Marietta	77,494	211.1	2,106.00	5.74	50,000.00	136.24
Marquette	47,700	16.7	7,085.00	2.49	83,139.36	29.16
Marygrove	12,603	88.7	2,952.00	20.79	57,627.95	405.83
Miami	75,000	43.9	12,500.00	7.31	.....	.....
Michigan St. College of Agric.	61,190	21.1	10,527.00	3.63	438,762.96	151.09
Michigan, Univ. of	649,912	63.7	138,545.00	13.58	.....	.....

Table 19 (Continued). Libraries and Laboratories—Significant Facts in Detail (Standard No. 11)

	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expenditures for Books and Magazines 1926-27	Per Capita Expend- itures (Reg. Day Student) 1926-27	Laboratory Replacement Value	Lab. Replace- ment Value Per Day Student 1926-27
Milwaukee-Downer	25,000	64.3	2,199.00	5.65	30,000.00	77.12
Minnesota	486,507	39.8	71,641.00	5.86	369,000.00	30.17
Missouri, Univ. of	232,784	53.0	35,322.00	8.05	1,612,078.00	367.30
Missouri Valley	18,500	61.9	1,049.00	3.51	15,600.00	52.17
Monmouth	18,000	37.1	2,243.00	4.62	27,500.00	56.70
Montana St. College	29,064	31.1	2,699.00	2.89	52,500.00	56.15
Montana, St. Univ. of	103,000	75.8	14,946.00	11.00	54,564.00	40.15
Morningside	28,000	44.9	1,250.00	2.01	20,800.00	33.39
Mount St. Joseph	12,000	56.3	1,300.00	6.10	1,140.00	5.35
Mount Union	26,487	52.4	2,643.00	5.23	.....	.....
Muskingum	16,000	18.0	1,917.00	2.16	12,450.00	14.00
Nebraska, Univ. of	222,844	22.2	40,253.00	4.00	466,751.16	46.43
Nebraska Wesleyan ..	20,490	28.8	1,840.00	2.59	.....	.....
New Mexico College of Agric.	22,620	87.7	3,259.00	12.63	.....	.....
New Mexico, St. Univ. of	30,000	68.5	1,678.00	3.83	24,265.00	55.40
North Central	14,000	29.5	1,577.00	3.32	22,757.01	47.91
N. Dakota Agric.	35,410	33.0	3,496.00	3.26	66,988.25	62.49
N. Dakota, Univ. of ..	90,000	60.7	9,634.00	6.50	150,136.00	101.24
Northwestern	280,425	52.5	63,753.00	11.93	735,493.00	137.60
Notre Dame	136,284	49.1	7,693.00	2.77	139,000.00	50.11
Oberlin	285,417	212.7	14,276.00	10.64	135,000.00	100.60
Ohio State	307,000	32.7	52,800.00	5.63	.....	.....
Ohio University	51,071	52.4	.....	.....	.....	.....
Ohio Wesleyan	113,906	61.9	9,471.00	5.15	139,968.41	76.07
Oklahoma Agric.	43,421	14.0	14,000.00	4.52	67,899.00	21.92
Oklahoma College for Women	12,929	18.1	3,074.00	4.31	42,850.00	60.10
Oklahoma, Univ. of ..	87,000	17.4	20,000.00	3.99	.....	.....
Ottawa	12,300	35.4	978.00	2.82	43,568.85	125.56
Otterbein	22,592	44.7	1,461.00	2.89	39,400.00	78.02
Ouachita	10,458	28.0	3,745.00	10.04	800.00	2.14
Park	35,576	85.1	1,929.00	4.61	50,508.90	120.83
Parsons	17,000	34.2	1,159.00	2.33	17,794.05	35.80
Penn.	12,474	36.1	1,164.00	3.36	13,545.00	39.15
Phillips	14,873	23.7	3,066.00	4.89	23,525.00	37.52
Purdue	83,358	23.4	12,000.00	3.37	151,493.07	42.58
Rockford	13,886	35.1	2,513.00	6.35	20,000.00	50.51
Rosary	14,000	50.7	1,366.00	4.95	23,324.44	84.51
Rose Polytechnic.	10,000	41.7	1,000.00	4.17	89,533.06	373.05
St. Ambrose	11,000	79.1	2,347.00	16.88	20,000.00	143.88
St. Benedict's	45,000	235.6	950.00	4.97	22,280.00	116.65
St. Catherine	22,800	63.7	6,434.00	17.97	34,000.00	94.97
St. Louis	126,194	71.0	14,062.00	7.91	96,808.50	54.48

Table 19 (Continued). Libraries and Laboratories—Significant Facts in Detail (Standard No. 11)

	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expenditures for Books and Magazines 1926-27	Per Capita Expend- itures (Reg. Day Student) 1926-27	Laboratory Replacement Value	Lab. Replace- ment Value Per Day Student 1926-27
St. Mary's-Notre Dame	16,023	58.7	1,200.00	4.40	362.21	1.33
St. Mary's Prairie du Chien	12,464	89.7	4,894.00	35.21	9,710.00	69.86
St. Mary's-St. Mary's St. Mary-of-the- Woods	20,203	125.5	1,181.00	7.34	21,653.11	134.49
St. Olaf	30,151	116.4	4,656.00	17.98	17,800.00	68.73
St. Teresa	27,540	27.0	3,368.00	3.31	38,321.27	37.61
St. Thomas	23,155	74.5	3,298.00	10.60	250,000.00	803.86
St. Xavier	10,861	24.9	600.00	1.38	27,000.00	61.93
Shurtleff	65,000	176.6	1,790.00	4.86	12,000.00	32.61
Simpson	19,369	88.4	1,200.00	5.48	14,000.00	63.93
S. Dakota St. School of Mines	20,000	31.3	2,631.00	4.12	41,500.00	64.95
S. Dakota St. College of Agric.	10,000	38.3	1,915.00	7.34	107,318.77	411.18
S. Dakota, Univ. of ..	33,000	36.3	2,612.00	2.87	50,841.45	55.93
Southwestern	60,000	69.0	7,638.00	8.78	225,000.00	258.62
Toledo	18,000	22.6	1,719.00	2.16	59,725.00	74.94
Wabash	20,808	29.6	2,775.00	3.95	43,500.00	61.97
Washburn	39,128	86.8	1,564.00	3.47	50,060.00	111.00
Washington	26,000	31.3	3,581.00	4.31	1,500.00	1.81
Webster	142,284	48.9	20,306.00	6.98	211,978.94	72.87
West Virginia Colle- gate	10,133	67.6	1,062.00	7.08	17,412.00	116.08
West Virginia Univ. leyan	10,178	26.6	3,570.00	9.35	59,341.92	155.35
Western College for Women	90,000	31.0	11,000.00	3.78	26,000.00	8.94
Western Reserve	30,000	75.9	2,142.00	5.42	10,500.00	26.58
Westminster	310,000	97.3	40,329.00	12.66	19,114.56	65.46
Wheaton	12,427	42.6	1,173.00	4.02	21,400.00	46.42
Wichita	16,000	34.7	1,930.00	4.19	20,300.79	33.72
William Jewell	22,733	37.8	1,322.00	2.22	29,247.00	54.16
Wisconsin	30,000	55.6	1,200.00	2.67	10,600.00	36.55
Wittenberg	771,000	93.8	4,861.00	5.04	54,874.00	56.92
Wooster	42,000	43.6	3,795.00	4.10	76,500.00	82.70
Wyoming	56,000	60.5	11,484.00	11.53	116,900.00	117.37
Yankton	64,952	65.2	773.00	2.67	10,600.00	36.55
Total	15,000	51.7				
Average	11,096,206		\$1,369,496.00		\$15,450,545.48	
High	68,075		\$8,613.00		\$105,105.74	
Median	771,000	235.6	\$138,545.00	\$35.21	\$3,343,929.00	\$801.86
Low	27,500	47.9	\$2,643.00	\$4.97	\$38,321.27	\$61.97
	8,188	11.2	\$600.00	\$0.58	\$362.21	\$1.33

Table 20. Libraries—Twenty Lowest Colleges and Universities Rated with Equal Weight to Volumes Per Regular Day Student and Expenditures for Books and Magazines Per Regular Day Student, 1926-27 (Standard No. 11).

1. Oklahoma Agric.	59.8
2. Bradley	59.7
3. Gustavus-Adolphus	59.4
4. Parsons	59.0
5. Denver	58.7
6. Michigan St. Coll. of Agric.	58.4
7. Purdue	58.2
8. Lewis	58.1
9. Oklahoma, Univ. of	58.1
10. Nebraska Wesleyan	56.0
11. De Pauw	55.8
12. Kansas St. Agric.	51.8
13. Southwestern	45.2
14. Marquette	42.4
15. Muskingum	40.4
16. St. Thomas	39.8
17. Hastings	38.9
18. De Paul	37.1
19. Detroit, City of	34.2
20. Loyola	20.3

Table 21. Laboratory Replacement Value Per Regular Day Student—Twenty Lowest Colleges and Universities, 1926-27 (Standard No. 11).

1. Drake	\$29.72
2. Butler	29.70
3. Marquette	29.16
4. Concordia	28.94
5. Creighton	28.38
6. Western College for Women	26.58
7. De Paul	26.48
8. Hiram	25.74
9. Heidelberg	22.38
10. Oklahoma Agric.	21.92
11. Gustavus-Adolphus	21.74
12. De Pauw	21.26
13. Muskingum	14.00
14. West Virginia Wesleyan	8.94
15. Mount St. Joseph	5.35
16. Augustana, Rock Island	3.92
17. Ouachita	2.14
18. Washburn	1.81
19. Denver	1.49
20. St. Mary's—Notre Dame	1.33

The financial standard has been enforced with more rigor than any other standard. There is some question as to whether this has been wholly justified. There is, however, a very general feeling that the minimum endowment and income are very low and may, therefore be enforced to the letter. Moreover, the Association has pursued the policy of computing toward the endowment requirement capitalized income from stable sources. Exception has also been made of Catholic institutions where services were being contributed by members of teaching orders. In such cases the custom has been followed of requiring only that there be sufficient productive endowment to offset any indebtedness. I trust that the Committee authorized at the 1928 meeting to consider the application of the financial standard to Catholic institutions may be able to devise

a more satisfactory method.

Attention should be called to the fact that figures representing per capita income in large institutions are not necessarily of great value, because of the proportion of income which is used for many other purposes than teaching. Most of the small institutions have few other activities than teaching; and I feel justified, therefore, in calling attention to those that are lowest in the list, as shown by Table 24.

Studies made by Mr. Reeves during the last few years bear on this situation and have created much interest throughout the Association. While the standard does not specifically recognize any per capita income requirement, it does recognize the necessity of minimum income and the necessity of progressive increase in income with increase in enrollment.

Table 22. Finances, Colleges and Universities (Standard No. 12)

A	B	C	D	E	F	G	H	I	J	K
Day School Enrollment (First Semester 1927-28)	Endowment Needed	Total Acceptable Endowment Including Capitalized Income	Capitalized Permanent Income	Productive Endowment Indebtedness	Per Capita Endowment (Excluding Public Institutions)	Total Acceptable Income	Total Income Needed	Income Needed from Other than Students	Income from Other than Students	Per Capita Income
Akron	1,118	\$ 70,522.43	.....	\$ 70,522.43	.....	\$ 268,980.41	\$100,000	\$ 50,000	\$ 181,774.50	\$240.89
Albion	771	1,289,081.00	\$28,000.00	861,081.00	\$1,671.96	195,686.00	80,000	40,000	74,260.00	253.81
Alma	269	850,234.37	226,341.00	623,893.87	3,160.72	93,832.04	50,000	25,000	57,726.26	348.82
Antioch	689	.....	.....	.....	.....	283,394.09	75,000	37,500	109,403.26	411.31
Arizona	1,719	.....	.....	.....	.....	1,124,137.66	130,000	65,000	1,021,896.95	653.95
Arkansas	1,420	.....	.....	.....	.....	800,000.00	115,000	57,500	25,000.00	563.38
Armour	821	132,666.67	.....	132,666.67	.....	460,009.24	85,000	42,500	210,248.59	560.30
Augustana	768	420,549.95	.....	420,549.95	512.24	133,528.50	80,000	40,000	45,210.90	173.87
Baker	451	1,414,940.10	900,398.00	514,542.10	1,842.37	140,157.65	65,000	32,500	70,706.68	310.77
Baldwin-Wallace	406	777,379.65	.....	777,379.65	1,723.68	181,829.00	65,000	32,500	101,125.00	455.21
Battle Creek	596	1,124,027.00	.....	1,124,027.00	2,768.54	238,897.00	70,000	35,000	136,040.86	387.41
Beloit	536	1,158,432.04	.....	1,158,432.04	1,943.66	262,358.00	70,000	35,000	150,971.00	489.47
Bethany	322	2,199,976.00	.....	2,199,976.00	4,304.43	138,945.29	60,000	30,000	86,760.89	431.51
Butler	600	1,684,886.00	.....	1,684,886.00	5,232.56	137,972.00	80,000	40,000	107,337.00	296.46
Bradley	715	2,024,507.00	.....	2,024,507.00	2,831.48	307,549.51	125,000	62,500	70,840.44	185.38
Capital	1,659	1,413,926.00	852,580.00	547,115.00	2,978.07	141,268.00	65,000	32,500	86,747.00	310.57
Carleton	470	1,399,695.00	.....	1,399,695.00	2,525.21	432,469.09	85,000	42,500	198,921.20	524.84
Carroll	824	2,080,770.73	71,785.80	646,823.53	1,844.05	111,118.78	60,000	30,000	53,405.89	301.95
Carthage	368	678,609.33	167,388.40	463,567.49	2,561.86	74,653.92	55,000	27,500	30,894.34	303.47
Case	246	4,040,534.00	.....	4,040,534.00	6,391.41	342,024.43	75,000	37,500	189,726.09	557.95
Central	613	4,040,534.00	.....	4,040,534.00	1,796.91	150,809.00	70,000	35,000	88,636.00	250.10
Chicago	5,718	1,083,538.00	.....	1,083,538.00	6,797.94	4,342,784.41	330,000	165,000	2,798,387.62	759.49
Cincinnati	4,309	38,870,620.05	.....	38,870,620.05	5,957,062.56	1,646,829.66	260,000	130,000	1,040,390.48	382.18
Coe	741	5,957,062.56	.....	5,957,062.56	1,817.35	194,311.13	80,000	40,000	65,192.25	262.50
Colorado Agric.	1,121	1,346,656.91	.....	1,346,656.91	.....	500,309.19	100,000	50,000	467,489.67	416.31
Colorado College	564	2,278,940.00	.....	2,278,940.00	4,040.67	294,612.00	70,000	35,000	176,630.00	522.36
Colorado, Univ. of	2,913	73,000.00	.....	73,000.00	.....	1,613,043.81	190,000	95,000	1,232,887.59	553.74
Columbia	308	1,042,341.88	.....	1,042,341.88	3,384.23	37,087.14	60,000	30,000	2,690.00	120.41
Concordia	401	865,958.37	546,586.60	319,371.77	2,159.50	96,866.99	60,000	30,000	41,412.04	241.56
Cornell	536	1,229,747.22	.....	1,229,747.22	2,294.30	177,094.32	70,000	35,000	58,686.08	330.40
Creighton	319	2,090,139.66	.....	2,090,139.66	1,581.64	508,736.41	110,000	55,000	217,652.94	385.70
Culver-Stockton	248	1,086,040.85	.....	1,086,040.85	4,379.20	103,592.62	55,000	27,500	71,280.62	417.71
Dakota Wesleyan	292	794,162.43	394,897.40	421,596.03	2,719.73	88,661.19	55,000	27,500	39,854.42	303.63
Denison	872	1,224,000.00	.....	1,224,000.00	1,403.67	298,460.00	85,000	42,500	118,460.00	342.27
Denver	1,618	1,865,564.70	121,697.60	1,743,867.10	1,153.01	275,448.19	125,000	62,500	64,307.11	170.24
De Paul	1,124	.....	.....	.....	.....	267,940.56	100,000	50,000	.....	238.38

*—Publicly supported institutions.

**—Catholic institutions.

Table 22 (Continued). Finances, Colleges and Universities (Standard No. 12)

A	B	C	D	E	F	G	H	I	J	K
Day School Enrollment (First Semester 1927-28)	Endowment Needed	Total Acceptable Endowment Including Capitalized Income	Capitalized Permanent Income	Productive Endowment Less Indebtedness	Per Capita Endowment (Excluding Public Institutions)	Total Acceptable Income	Total Income Needed	Income from Other than Students	Income from Other than Students	Per Capita Income
De Pauw	1,619	\$1,250,000	\$482,777.80	\$4,746,102.40	\$3,229.70	\$500,620.87	\$125,000	\$62,500	\$219,195.67	\$309.22
Detroit	1,801	.....	.....	.....	.....	433,483.56	130,000	65,000	270,000.00	240.69
Doane	550,000	569,920.66	119,061.20	450,859.46	2,626.36	110,580.21	55,000	27,500	74,781.15	509.59
Drake	1,287	1,321,296.91	81,685.60	1,239,611.31	1,026.65	421,008.72	105,000	52,500	57,500.76	327.12
Drury	458	874,400.00	.....	874,400.00	1,909.17	116,128.18	65,000	32,500	64,003.38	253.55
Dubuque	180	538,930.14	.....	538,930.14	3,105.17	135,854.78	50,000	25,000	126,028.78	754.75
Earlham	461	1,200,728.89	.....	1,200,728.89	2,604.62	185,862.44	65,000	32,500	88,520.93	403.17
Emporia	337	1,163,847.14	859,188.40	304,658.74	3,453.55	139,542.27	60,000	30,000	74,246.75	414.07
Eureka	228	750,494.74	129,041.20	531,453.54	3,291.64	103,146.69	55,000	27,500	49,119.02	452.40
Franklin	283	844,422.39	119,700.00	724,722.39	2,983.82	159,004.03	55,000	27,500	104,835.29	561.85
Grinnell	745	1,388,730.83	44,000.00	1,344,730.83	1,061.07	293,609.28	80,000	40,000	116,024.29	394.11
Gustavus-Adolphus	493	1,173,368.61	660,000.00	513,368.61	2,380.06	132,839.82	65,000	32,500	69,856.85	289.45
Hamline	393	1,286,004.25	123,083.00	1,162,921.25	3,272.28	161,313.25	60,000	30,000	71,946.75	410.47
Hanover	225	798,348.96	87,131.20	711,217.76	3,548.22	74,098.78	55,000	27,500	49,041.45	329.33
Hastings	515	905,886.56	252,060.40	653,826.16	1,759.00	94,496.29	70,000	35,000	46,804.98	183.49
Heidelberg	440	1,005,049.00	146,070.00	858,979.00	2,281.20	122,570.00	65,000	32,500	58,891.00	278.57
Hendrix	302	701,125.80	151,125.80	550,000.00	2,321.61	115,611.32	55,000	27,500	60,263.45	382.82
Hillsdale	377	728,161.24	.....	728,161.24	1,931.46	131,945.68	60,000	30,000	70,403.40	349.99
Hiram	297	1,290,391.00	348,350.20	1,290,391.00	4,344.75	131,692.00	55,000	27,500	72,928.00	443.41
Hope	498	1,152,054.81	.....	803,704.61	2,313.36	95,824.12	65,000	32,500	57,730.77	192.42
Huron	278	814,631.14	.....	814,631.14	2,930.33	110,168.06	55,000	27,500	73,513.26	396.29
Illinois College	391	1,124,906.43	.....	705,114.00	2,877.00	118,601.80	60,000	30,000	60,645.80	30.333
Illinois, Univ. of	12,033	705,114.00	.....	705,114.00	.....	5,859,086.00	645,000	322,500	5,051,295.00	486.92
Illinois Wesleyan	647	1,269,293.00	134,840.00	1,134,453.00	1,961.81	238,261.00	75,000	37,500	66,609.00	368.26
Illinois Woman's Col.	324	697,700.00	78,060.00	619,640.00	2,153.40	118,622.81	60,000	30,000	33,521.37	366.12
Indiana	4,166	299,528.67	.....	299,528.67	.....	1,775,008.44	250,000	125,000	1,204,106.36	426.07
Iowa St. Col. of Ag.	3,851	694,982.07	.....	694,982.07	.....	2,761,796.57	235,000	117,500	2,384,533.97	717.16
Iowa, St. Univ. of	5,350	.....	.....	.....	.....	4,342,547.61	310,000	155,000	3,711,322.54	811.69
Iowa Wesleyan	331	741,237.00	384,380.00	356,857.00	2,239.39	86,437.00	60,000	30,000	40,079.58	261.14
James Millikin	538	1,291,849.07	.....	1,291,849.07	2,315.14	197,973.32	70,000	35,000	64,870.00	354.79
Jamestown	376	817,067.41	.....	817,067.41	2,173.05	53,759.00	60,000	30,000	48,903.48	238.07
John Carroll	305	.....	.....	.....	.....	53,759.00	60,000	30,000	8,594.00	176.26
Kalamazoo	369	973,810.35	.....	973,810.35	2,639.05	137,325.27	60,000	30,000	87,936.78	372.16
Kansas St. Agric.	2,876	505,508.56	.....	505,508.56	.....	1,975,684.25	185,000	92,500	1,755,376.60	686.96
Kansas, Univ. of	4,091	.....	.....	.....	.....	1,406,930.00	245,000	122,500	1,135,500.60	343.91

*—Publicly supported institutions.

**—Catholic institutions.

Table 22 (Continued). Finances, Colleges and Universities (Standard No. 12)

A	B	C	D	E	F	G	H	I	J	K
Day School Enrollment (First Semester 1927-28)	Endowment Needed	Total Acceptable Endowment Including Capitalized Income	Capitalized Permanent Income	Productive Endowment Less Indebtedness	Per Capita Endowment (Including Public Institutions)	Total Acceptable Income	Total Income Needed	Income Needed from Other Students	Income from Other Students	Per Capita Income
Kenyon	\$ 260	\$1,753,423.00	\$136,250.00	\$1,617,173.00	\$6,743.93	\$150,999.00	\$ 55,000	\$ 27,500	\$98,654.00	\$580.77
Knox	642	1,596,003.28	.....	1,596,003.28	2,485.99	110,584.43	75,000	37,500	338.26	172.25
Lake Erie	214	687,904.08	.....	687,904.08	3,214.51	128,353.95	55,000	27,500	65,931.45	599.78
Lake Forest	386	1,385,345.00	.....	1,385,345.00	3,588.98	66,527.89	60,000	30,000	22,643.82	224.17
Lawrence	1,070	1,479,389.62	.....	1,479,389.62	1,382.61	263,269.47	95,000	47,500	139,831.59	246.05
Lewis	969	1,537,295.00	.....	1,537,295.00	1,586.48	266,295.00	90,000	45,000	112,465.00	305.77
Lindenwood	449	1,187,803.26	.....	1,187,803.26	2,645.44	242,600.61	65,000	32,500	113,421.87	540.31
Loretto	112	484,000.00	.....	484,000.00	4,321.43	102,000.00	50,000	25,000	27,000.00	910.71
Loyola	2,124	525,000.00	.....	525,000.00	247.18	184,502.42	150,000	75,000	79,959.42	86.87
Luther	343	1,431,126.58	854,344.00	576,782.58	4,172.38	82,943.09	60,000	30,000	44,390.37	241.82
Macalester	465	1,384,204.45	.....	1,384,204.45	2,976.78	169,925.00	65,000	32,500	93,967.86	365.43
Marietta	359	1,324,559.20	.....	1,324,559.20	3,689.58	142,563.28	60,000	30,000	98,629.51	397.11
Marquette	2,818	2,109,800.00	466,800.00	1,643,000.00	748.69	283,864.03	185,000	92,500	82,109.49	100.73
Marygrove	304	1,000,000.00	.....	1,000,000.00	3,289.47	114,008.54	55,000	27,500	52,876.54	375.03
Miami	1,692	111,800.00	.....	111,800.00	.....	622,886.00	125,000	62,500	505,084.00	368.14
Mich. St. Col. of Ag.	2,828	3,263,112.39	.....	3,263,112.39	.....	2,977,913.95	185,000	92,500	2,713,563.95	1,053.01
Michigan, Univ. of	10,200	1,213,985.57	.....	1,213,985.57	3,019.86	8,384,685.45	380,000	290,000	7,280,075.36	841.64
Milwaukee-Dowder	402	1,213,985.57	.....	1,213,985.57	.....	178,814.22	60,000	30,000	81,702.54	444.81
Minnesota	11,519	1,898,686.81	.....	1,898,686.81	.....	5,775,793.94	695,000	347,500	4,764,706.39	501.41
Missouri, Univ. of	4,000	588,540.43	33,880.00	554,660.43	2,651.08	77,291.16	55,000	27,500	43,122.66	348.16
Missouri Valley	222	1,112,533.33	125,028.00	987,475.33	2,362.00	142,043.56	65,000	32,500	68,131.56	301.58
Monmouth	471	.....	.....	.....	.....	370,947.50	90,000	45,000	312,868.23	409.43
Montana State Coll.	906	75,000.00	.....	75,000.00	.....	463,544.46	110,000	55,000	387,702.97	340.34
Montana, Univ. of	1,362	851,836.00	356,260.00	495,576.00	1,126.77	151,040.00	75,000	37,500	32,085.00	273.63
Morningside	756	830,800.00	280,800.00	550,000.00	4,133.33	55,000.00	50,000	25,000	.....	223.89
Mount St. Joseph	201	876,728.00	200,000.00	705,628.00	1,699.09	131,005.00	70,000	35,000	40,251.00	253.89
Mount Union	516	906,151.89	471,048.00	435,103.89	1,995.71	176,090.09	85,000	42,500	56,742.56	212.93
Muskingum	827	949,523.62	.....	949,523.62	.....	2,765,844.35	360,000	180,000	2,322,690.31	436.25
Nbraska, Univ. of	6,340	1,622,060.00	802,060.00	820,000.00	2,203.89	173,100.69	80,000	40,000	89,973.78	235.19
Nebraska Wesleyan	736	115,000.00	.....	115,000.00	.....	303,121.92	55,000	27,500	296,051.92	1,131.05
New Mex. Col. of Ag.	268	.....	.....	.....	.....	128,010.67	65,000	32,500	50,227.80	252.49
New Mex. St. Univ.	528	895,828.57	259,315.20	636,513.37	1,766.92	386,522.19	95,000	47,500	359,573.19	353.63
North Central	507	1,555,690.30	.....	1,555,690.30	.....	1,700,000.00	120,000	60,000	579,500.00	396.82
North Dakota Agric.	1,093	1,700,000.00	.....	1,700,000.00	.....	2,708,138.03	320,000	160,000	984,510.77	489.72
North Dak., Univ. of	1,604	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northwestern	5,530	11,422,854.27	.....	11,422,854.27	2,065.62	.....	.....	.....	.....	.....

*—Publicly supported institutions.
 **—Catholic institutions.

Table 22 (Continued). Finances, Colleges and Universities (Standard No. 12)

A	B	C	D	E	F	G	H	I	J	K
Day School Enrollment (First Semester 1927-28)	Endowment Needed	Total Endowment Including Capitalized Income	Capitalized Permanent Income	Productive Endowment Less Indebtedness	Per Capita Endowment (Excluding Public Institutions)	Total Acceptable Income	Total Income Needed	Income Needed from Other than Students	Income from Other than Students	Per Capita Income
Notre Dame	2,870	\$1,000,000	.....	\$1,000,000	\$ 348.43	\$ 603,400.15	\$185,000	\$ 92,500	\$ 43,480.31	\$210.24
Oberlin	1,767	14,222,167.68	.....	14,222,796.44	8,048.76	1,290,531.72	130,000	65,000	807,065.19	730.35
Ohio State Univ.	10,183	1,146,687.85	.....	1,146,687.85	.....	5,892,666.13	590,000	295,000	5,336,506.82	578.68
Ohio University	1,074	75,000.00	.....	75,000.00	.....	790,815.89	95,000	47,500	584,545.00	736.33
Ohio Wesleyan	1,848	1,868,031.47	.....	1,868,031.47	1,010.84	567,768.54	135,000	67,500	154,446.55	307.23
Okla. Agric. & Mech. 2,951	*	.....	.....	.....	.....	855,000.00	190,000	95,000	840,000.00	289.73
Okla. Col. for Women 728	*	.....	.....	.....	.....	178,200.00	80,000	40,000	170,000.00	244.78
Oklahoma, Univ. of 4,898	*	.....	.....	.....	.....	1,454,166.43	285,000	142,500	1,310,965.41	296.89
Ottawa	600,000	904,186.54	526,273.60	377,912.94	2,790.70	91,756.39	60,000	30,000	39,443.51	283.20
Otterbein	445	1,235,498.00	224,340.00	1,011,158.00	2,776.40	168,272.00	65,000	32,500	91,975.60	378.14
Ouachita	304	871,739.06	358,814.40	512,924.66	2,867.56	78,288.46	55,000	27,500	28,122.71	257.53
Park	510	1,477,123.19	.....	1,477,123.19	2,896.32	161,595.88	70,000	32,000	121,931.03	316.85
Parsons	430	694,330.25	175,166.20	519,164.05	1,614.72	159,891.43	65,000	32,500	77,391.65	371.84
Penn	301	550,000.00	605,024.59	605,024.59	2,010.05	83,566.97	55,000	27,500	33,430.51	277.63
Phillips	558	1,056,686.69	481,021.60	575,665.09	1,893.70	123,476.24	70,000	35,000	35,937.36	221.28
Purdue	3,647	340,000.00	.....	340,000.00	.....	1,613,977.21	225,000	112,500	1,348,402.43	442.55
Rockford	400	927,769.13	.....	927,769.13	2,319.42	203,833.71	60,000	30,000	98,699.96	509.58
Rosary	256	202,223.09	.....	202,223.09	789.93	98,696.37	55,000	27,500	51,291.74	385.53
Rose Polytechnic	254	1,459,798.40	.....	1,459,798.40	5,747.24	128,134.85	55,000	27,500	97,551.85	504.47
St. Ambrose	161	977,480.00	.....	577,480.00	3,586.83	38,928.00	50,000	25,000	21,203.00	211.79
St. Benedict's	188	986,141.64	940,294.20	45,847.44	5,245.43	38,358.74	50,000	25,000	12,283.21	204.04
St. Catharine	315	502,000.00	.....	502,000.00	1,593.65	126,036.59	60,000	30,000	34,136.89	400.12
St. Louis	1,786	160,000.00	.....	160,000.00	89.59	78,956.15	130,000	65,000	16,640.50	44.21
St. Mary's-Notre Dame	345	.....	.....	.....	.....	313,255.11	60,000	30,000	.....	907.99
St. Mary's-Prairie du Chien	155	481,000.00	.....	481,000.00	3,103.23	34,686.50	50,000	25,000	9,183.50	223.78
St. Mary's-St. Mary's 176	**	987,242.64	.....	987,242.64	5,699.33	86,182.60	50,000	25,000	42,864.95	489.67
St. Mary-of-the-Woods 266	**	552,542.82	.....	552,542.82	2,077.23	65,191.42	55,000	27,500	.....	215.08
St. Olaf	985	2,031,467.77	1,473,984.00	557,492.77	2,062.41	210,052.68	90,000	45,000	70,388.96	213.25
St. Teresa	336	.....	.....	.....	.....	149,453.05	60,000	30,000	46,500.00	444.80
St. Thomas	468	263,087.93	.....	263,087.93	562.15	202,594.36	65,000	32,500	77,382.04	432.89
St. Xavier	389	.....	.....	.....	.....	68,164.49	60,000	30,000	28,557.38	175.23
Shurtleff	232	577,005.02	125,166.00	451,839.02	2,487.09	81,466.28	55,000	27,500	50,777.79	351.15
Simpson	652	854,073.00	401,712.00	452,361.00	1,309.93	136,293.00	75,000	37,500	52,854.00	209.04

*—Publicly supported institutions.
**—Catholic institutions.

Table 22 (Continued). Finances, Colleges and Universities (Standard No. 12)

A	B	C	D	E	F	G	H	I	J	K
Day School Enrollment (First Semester 1927-28)	Endowment Needed	Total Acceptable Endowment Including Capitalized Income	Capitalized Permanent Income	Productive Endowment Less Indebtedness	Per Capita Endowment (Excluding Public Institutions)	Total Acceptable Income	Total Income Needed	Income Needed from Other than Students	Income from Other than Students	Per Capita Income
S. Dakota St. School of Mines	295	.....	.....	.....	.....	\$151,554.70	\$ 55,000	\$ 27,500	\$138,150.29	\$513.74
S. Dakota St. College of Agriculture	885	737,318.08	.....	738,508.08	.....	519,409.22	85,000	42,500	460,822.37	586.90
S. Dakota, Univ. of Southwestern	893	856,933.69	547,530.20	309,403.49	1,162.73	488,256.02	85,000	42,500	430,385.47	546.76
Toledo	825	12,768.33	.....	12,768.33	.....	186,581.99	80,000	40,000	40,095.07	253.16
Wabash	385	1,613,811.51	.....	1,613,811.51	4,191.72	249,476.94	85,000	42,500	203,727.06	302.40
Washington	864	1,058,410.04	.....	1,058,410.04	1,225.01	149,262.54	60,000	30,000	107,096.54	387.69
Washington	3,385	11,753,159.75	.....	11,753,159.75	3,472.13	205,706.68	85,000	42,500	67,051.75	238.09
Webster	157	.....	.....	.....	.....	1,911,030.36	210,000	105,000	964,406.37	564.56
W. Va. Collegiate	477	.....	.....	.....	.....	81,418.50	50,000	25,000	50,000.00	518.59
West Virginia Univ.	2,575	.....	.....	.....	.....	169,951.51	65,000	32,500	145,000.00	356.29
W. Va. Wesleyan	344	621,010.11	174,103.00	446,907.11	1,805.26	1,821,681.16	170,000	85,000	1,657,026.01	707.45
West. Col. for Women	385	765,064.38	.....	765,064.38	1,987.18	84,461.52	60,000	30,000	42,736.64	245.53
Western Reserve	3,385	6,591,209.00	.....	6,603,209.00	1,947.18	184,032.43	60,000	30,000	91,618.39	478.01
Westminster	313	616,698.89	.....	616,698.89	1,970.28	1,429,382.00	210,000	105,000	740,954.00	422.27
Wheaton	462	744,639.20	150,000.00	594,639.20	1,611.77	67,924.65	55,000	27,500	36,124.32	217.01
Wichita	739	48,731.19	.....	48,731.19	.....	115,540.60	65,000	32,500	49,402.07	250.09
William Jewell	519	1,095,899.13	115,429.20	980,469.93	2,111.56	179,226.75	80,000	40,000	120,831.29	242.53
Wisconsin	5,942	536,692.11	.....	536,692.11	.....	120,006.82	70,000	35,000	56,415.14	231.28
Wittenberg	1,047	1,520,970.80	285,421.00	1,235,549.80	1,452.69	7,008,740.00	340,000	170,000	5,967,163.24	1,179.53
Wooster	852	2,208,873.32	.....	2,213,145.79	2,592.57	373,311.45	95,000	47,500	133,276.82	356.55
Wyoming	1,040	.....	.....	1,580,400.00	.....	332,069.60	85,000	42,500	160,032.33	389.75
Yankton	332	822,253.06	170,741.00	651,512.06	2,476.67	572,582.50	95,000	47,500	480,566.41	550.56
High .....	.....	.....	.....	.....	.....	112,732.10	60,000	30,000	51,003.31	339.55
Median .....	.....	.....	.....	.....	.....	\$8,048.76	.....	.....	.....	\$1,179.55
Low .....	.....	.....	.....	.....	.....	2,319.42	.....	.....	.....	356.55
.....	.....	.....	.....	.....	.....	419.81	.....	.....	.....	170.24

*—Publicly supported institutions.

**—Catholic institutions.

Table 23. Per Capita Endowment—Twenty Lowest Colleges and Universities, 1927-28, Omitting Public and Catholic (Capitalized Permanent Income Included) (Standard No. 12).

1. Hastings	\$1,759.00
2. Baker	1,723.68
3. Mount Union	1,699.09
4. Albion	1,671.96
5. Parsons	1,614.72
6. Wheaton	1,611.77
7. Lewis	1,586.48
8. Wittenberg	1,452.69
9. Denison	1,403.67
10. Lawrence	1,382.61
11. Simpson	1,309.93
12. Washburn	1,225.01
13. Southwestern	1,162.73
14. Denver	1,153.01
15. Morningside	1,126.77
16. Muskingum	1,095.71
17. Drake	1,026.65
18. Ohio Wesleyan	1,010.84
19. Butler	852.28
20. Armour	512.24

Table 24. Per Capita Income—Twenty Lowest Colleges and Universities, 1927-28, Omitting Catholic (Standard No. 12).

1. Luther	\$241.82
2. Concordia	241.56
3. Detroit	240.69
4. Akron	240.59
5. Washburn	238.00
6. Nebraska Wesleyan	235.19
7. William Jewell	231.28
8. Lake Forest	224.17
9. Phillips	221.28
10. Westminster	217.01
11. St. Olaf	213.25
12. Muskingum	212.93
13. Simpson	209.04
14. Morningside	199.79
15. Hope	192.42
16. Butler	185.38
17. Hastings	183.49
18. Augustana	173.87
19. Knox	172.25
20. Denver	170.24

Table 25. Catholic Institutions with Indebtedness in Excess of Actual Productive Endowment (Standard No. 12).

	Endowment	Indebtedness
St. Xavier	\$210,305.30	\$ 291,270.00
John Carroll	0.00	55,000.00
St. Mary's, Notre Dame	0.00	1,339,000.00

Standard No. 13. Secondary Schools

A college should not maintain a secondary school as part of its college organization.

This requirement is of decreasing importance since the objective of the standard has been so thoroughly accomplished that there are at present very few remaining exceptions.

In the same way, most of the institutions listed in Table 27 offer only a small amount of secondary school work. These exceptions to the custom of requiring any affiliated secondary division to be accredited by the Association are therefore unimportant.

Standard No. 14. Professional Departments

When an institution has, in addition to the College of Liberal Arts, professional or technical schools or departments, the College of Liberal Arts shall not be accepted for the approved list of the Association unless the professional or technical departments are of an accepted grade.

Standard No. 15. Inspection

No college should be accredited until it has been inspected and reported upon by an agent or agents regularly appointed by this Association.

No attempt will be made to secure specific data relating to Standard 14. All member institutions have indicated

Standard 15, of course, requires no comment.

Table 31 indicates 100% of these teachers colleges with qualitative scholastic requirements, as against 91% of the colleges, (Table 3). The average and the median amounts of upper-class work required for degree are practically the same in both groups.

Capital
Gustavus Adolphus
Hastings
Huron
Luther

Antioch
De Paul
Luther
St. Thomas
West Virginia U.

[illegible]

Which Are Low in Meeting the Various Standards

[illegible]

Table 28 (Continued). Composite List of Colleges and Universities Which Are Low in Meeting the Various Standards

Standard	2	3	3	5	6	7	10	11	11	12	12	12	13	13
Table	2	4	5	8	10	12	17	20	21	23	24	25	26	27
West Virginia														
Collegiate					†		†							
West Virginia Univ.														†
West Va. Wesleyan									†					
Western College														
for Women									†					
Western Reserve	†													
Westminster					†						†			
Wheaton					†					†				
Wichita					†									
William Jewell						†					†			
Wittenberg										†				
Wyoming	†													

Table 29. Summary of Students Admitted to Twenty Teachers Colleges, First Semester, 1927-28 (Standard No. 2)

Meeting Standards	Students Admitted	% of Total Number of New Students	Number of Institutions	% of Total Number of Institutions
1. With 15 units as required	8570	95.89	20	100
2. Not meeting standards				
a. With 14 units	169	1.89	6	30
b. With 13 units	25	.28	3	15
c. With less than 13 units	1	.01	1	5
Total regular students				
not meeting standards	195	2.18	7	35
d. Special students	124	1.39	13	65
Total all students (including specials)				
not meeting standards	319	3.56	13	65
Total	8,937		20	

Table 30. Teachers Colleges Admitting Conditioned Students, in the Order of the Percentage of Such Students Admitted, First Semester 1927-28 (Standard No. 2).

	No. of new students admitted	No. of conditioned students admitted	% of new students	No. of special students admitted	% of special students admitted	Total No. of students admitted without meeting standards	% of total of students admitted without meeting standards
Macomb, Illinois	369	2	.21	2	.21	4	1.08
Warrensburg, Missouri	334	1	.30	6	1.8	7	2.10
Pittsburg, Kansas	563	3	.53	19	3.37	22	3.91
Aberdeen, S. Dakota	418	4	.96	2	.48	6	1.44
Silver City, New Mexico	48	2	4.17	1	2.08	3	6.25
Kalamazoo, Michigan	1,072	83	7.74	12	1.12	95	8.86
Ypsilanti, Michigan	1,007	100	9.93	6	.60	106	10.53

In faculty training, the teachers colleges rate considerably lower than the colleges. In fact, one-half of the teachers colleges listed in Table 32 rank with the lowest twenty institutions on the college list (Table 8), and the median is only 34.8% as compared with a median of 63.3% for the colleges.

A comparison of Tables 33 and 7 shows that the average salaries paid by the teachers colleges in the highest quartile are not so high, and the average salaries paid by those in the lowest quartile are not so low as is true of the respective colleges and universities. The median institution in each entire group pays about the same average rate. It is probable, however, that the teachers colleges have a larger number of the faculty employed on a twelve-month basis than do the colleges.

Tables 34 and 35 indicate a larger percentage of the faculty teaching more than 16 hours, and a larger percentage of classes with more than 30 students, than is true of the colleges (Tables 9 and 11).

The growth of evening, extension, and correspondence work is even more vividly illustrated in Table 36 than in Table 14. The part-time enrollment reported in these teachers colleges is only 13.1% less than that of the regular day session.

The percentage of juniors and seniors, as shown by Table 38, is considerably less than is true of the colleges (Table 16). In fact, the median for the teachers colleges is only 23.9% and while the large number of short courses offered by these institutions must be taken into consideration, it would still seem that for more than one-half of this group to have less than one-fourth of the enrollment in the two upper years is not a favorable showing.

With respect to libraries and laboratories, we find the same unsatisfactory situation as was found to exist in the colleges. According to Table 39, the median expenditure per regular day student was only \$3.62; the median for the lowest quartile was only \$1.67. The other figures also, even with full allowance for the imperfections inherent in our method of measurement, indicate a situation which should be given immediate attention by the institutions concerned.

Table 31. Graduation from Twenty Teachers Colleges, 1927 (Standard No. 3).

1. Number of institutions meeting requirement of 120 semester hours or equivalent	20.....100%
2. Number of institutions meeting requirement for scholastic requirements	20.....100%
3. Number of institutions allowing graduation with less than 120 semester hours because of high grades, regular attendance, or other circumstances	1*.....5%
4. Minimum amount of work required for degree in courses not open to freshmen and sophomores	Average 42.6 s. h. Median 40 s. h.
5. Total number of students graduated with degree	2,308
Ratio of students graduated with degree to students admitted.....	1:3.87
Ratio of students graduated with degree to total enrollment (excluding summer session, evening, etc.)	1:8.65
6. Total number of students graduated with:	
3 years collegiate work.....	155
2 years collegiate work.....	5,222
1 year collegiate work.....	1,580
Less than 1 year collegiate work.....	26
*Warrensburg, Missouri (high grades)	

Table 32. Faculty Training in Twenty Teachers Colleges, 1927-28 (Standard No. 5)

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	TOTAL FACULTY			HEADS OF DEPARTMENTS			OTHERS OF PROF. RANK			ALL OTHER TEACHERS		
	Total Number	Number N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.	Total Number	Number Meeting N. C. A. Stds.	Per Cent Meeting N. C. A. Stds.
Colorado												
Greeley	98	23	23.5	19	8	42.1	70	10	14.3	9	5	55.5
Illinois												
Charleston	33	17	51.5	17	3	17.6	5	4	80.0	11	10	90.9
Macomb	57	22	38.6	18	7	38.9	29	6	20.7	10	9	90.0
Indiana												
Muncie	56	18	32.1	12	3	25.0	39	11	28.2	5	4	80.0
Terre Haute	91	30	33.0	10	1	10.0	46	1	2.2	35	28	80.0
Kansas												
Emporia	67	32	47.8	26	4	15.4	20	8	40.0	21	20	95.2
Hays	15	5	33.3	10	2	20.0	3	1	33.3	2	2	100.0
Pittsburg	112	26	23.2	18	4	22.2	74	5	6.8	20	17	85.0
Michigan												
Kalamazoo	190	165	86.8	...	...	...	...	...	...	190	165	86.8
Marquette	57	7	12.3	17	3	17.6	40	4	10.0	...	...	...
Mount Pleasant	47	23	48.9	20	6	30.0	8	...	...	19	17	89.4
Ypsilanti	117	17	14.5	101	10	9.9	16	7	43.7	...	...	...
Missouri												
Cape Girardeau	43	30	69.8	5	4	80.0	17	8	47.1	21	18	85.7
Kirksville	41	21	51.2	8	3	37.5	27	12	44.4	6	6	100.0
Maryville	42	14	33.3	12	4	33.3	30	10	33.3	...	...	...
Springfield	39	32	82.1	11	4	36.4	...	...	...	28	28	100.0
Warrensburg	22	8	36.4	10	5	50.0	12	3	25.0	...	...	...
New Mexico												
East Las Vegas	22	6	27.3	17	1	5.8	...	...	...	5	5	100.0
Silver City	31	20	64.5	14	3	21.4	...	...	...	17	17	100.0
South Dakota												
Aberdeen	53	8	15.1	22	4	18.2	30	4	13.3	1	...	...
Total	1,233	524	42.5	367	79	21.5	466	94	20.2	400	351	87.7
Average	61.6	26.2	42.5	19.3	4.15	21.5	29.1	5.87	20.2	25	21.9	87.6
Median			34.8			22.2			28.2			90.0

It may be of interest to note that at the annual meeting in 1928, twelve of the twenty teachers colleges listed in the above section were transferred to the list of colleges and universities. The others remain on the list of teacher-training institutions. Full details will be found in the June, 1928, issue of the Quarterly.

Table 33. Faculty Salaries in Twenty Teachers Colleges, 1927-28

Faculty Salaries	No. of Institutions	Highest Average	Lowest Average	Median Average	Median Av. of Highest $\frac{1}{4}$	Median Av. of Lowest $\frac{1}{4}$
Professors	17	\$4,360	\$2,436	\$3,278	\$4,071	\$2,880
Associate Professors	10	\$3,177	\$1,924	\$2,734	\$3,000	\$2,522
Assistant Professors	14	\$3,275	\$2,180	\$2,487	\$2,781	\$2,310
Instructors	13	\$2,388	\$1,360	\$1,880	\$2,335	\$1,500

Table 34. Teaching Hours in Twenty Teachers Colleges, First Semester 1927-28 (Standard No. 6)

		Per Cent
Total Faculty	1,034	
A. Number meeting North Central Association standards.....	929	89.8
1. Number teaching not more than 12 hours.....	253	24.4
2. Number teaching 13 or 14 hours.....	102	9.8
3. Number teaching 15 or 16 hours.....	574	55.6
B. Number not meeting North Central Association standards.....	105	10.2
1. Number teaching 17 or 18 hours.....	59	5.8
2. Number teaching over 18 hours.....	46	4.4
163 teachers from 14 institutions teach both collegiate and non-collegiate classes.		

Table 35. Size of Classes in Twenty Teachers Colleges, First Semester 1927-28 (Standard No. 7)

		Per Cent
Total Number of classes	3,667	
A. Number of classes meeting North Central standard.....	2,686	73.2
1. No. of classes with 1- 5 students.....	361	9.8
2. No. of classes with 6-10 students.....	617	16.8
3. No. of classes with 11-20 students.....	916	25.0
4. No. of classes with 21-30 students.....	792	21.6
B. Number of classes not meeting North Central standards.....	981	26.8
1. No. of classes with 31-40 students.....	541	14.8
2. No. of classes with 41-50 students.....	274	7.5
3. No. of classes with 51-60 students.....	93	2.5
4. No. of classes with over 60 students.....	73	2.0

Table 36. Summary of Enrollment in Twenty Teachers Colleges,
First Semester 1927-28

1. Regular Day School Enrollment

	Men	No. of Insts.	Women	No. of Insts.	Total	No. of Insts.
a. Graduate School	37	4	35	4	72	5
b. Theology	300	1	194	1	494	1
c. Teacher Training	6,369	20	13,481	20	19,850	20
d. Music	71	3	116	3	187	3
e. Art	1	1	1	1	2	1
Total	6,778	20	13,827	20	20,605	20
(including duplicates)						
Total					19,972	
(excluding duplicates)						

2. Special Students Included..... 166 students in 13 institutions

3. Summer Session29,495 students in 20 institutions

4. Part Time Enrollment:

Evening 850 students in 6 institutions

Extension 8,307 students in 17 institutions

Correspondence 7,749 students in 18 institutions

Others 444 students in 7 institutions

Total17,350 students

5. Elementary and Secondary Students

Academy or High School..... 1,728 students in 9 institutions

Training School 6,038 students in 17 institutions

Sub-Freshmen 24 students in 1 institution

Others 2,222 students in 4 institutions

Total10,012 students

6. Total enrollment by classes for first semester of 1927-28, for 1926-27, and for 1925-26.

	1927-28 No. of Students	%	1926-27 No. of Students	%	1925-26 No. of Students	%
Freshmen	9,012	76.1	11,959	76.3	11,809	76.7
Sophomores	6,083	76.1	7,558	76.3	7,850	76.7
Juniors	2,779	23.9	3,593	23.7	3,490	23.3
Seniors	1,954	23.9	2,462	23.7	2,455	23.3
Total	19,828		25,572		25,604	
Graduates	101	.5	181	.7	187	.7
Grand Total	19,929		25,753		25,791	

Table 37. Summary of Enrollment by Institutions, First Semester 1927-28

	Total Full Time Day School	Summer School 1927	Evening Sessions	Extension Classes	Correspondence Work
Colorado					
Greeley	1,732	2,551	53	866	996
Illinois					
Charleston	549	862	.....	.....	.....
Macomb	666	1,046	.....	938	.....
Indiana					
Muncie	1,037	1,377	.....	977	326
Terre Haute	1,462	2,613	662	1,617	795
Kansas					
Emporia	1,516	1,925	.....	25	957
Hays	606	791	.....	2	1,285
Pittsburg	1,462	3,326	.....	93	59
Michigan					
Kalamazoo	2,316	1,674	.....	1,001	513
Marquette	711	726	.....	.....	81
Mount Pleasant	921	1,167	31	110	798
Ypsilanti	2,383	2,142	42	957	313
Missouri					
Cape Girardeau	493	998	.....	20	161
Kirksville	698	1,513	.....	480	67
Maryville	579	1,009	.....	227	140
Springfield	978	1,715	.....	340	247
Warrensburg	922	1,927	42	478	328
New Mexico					
East Las Vegas.....	140	881	.....	49	101
Silver City	149	249	20	127	430
South Dakota					
Aberdeen	652	1,003	152
Total	19,972	29,495	850	8,307	7,749

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	1927-28 (First Semester Only)					1926-27 (Both Semesters)					1925-26 (Both Semesters)					1924-25 (Both Semesters)					% Jrs. & Srs. Average for the Year
	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Soph. Sr. Enrol.	% Fresh. & Soph. Sr. Enrol.	% Fr. & Soph. Sr. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Soph. Sr. Enrol.	% Fresh. & Soph. Sr. Enrol.	% Fr. & Soph. Sr. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Soph. Sr. Enrol.	% Fresh. & Soph. Sr. Enrol.	% Fr. & Soph. Sr. Enrol.	Enrol. in 4 Yrs.	Jun. & Sen. Enrol.	% Fr. & Soph. Sr. Enrol.	% Fresh. & Soph. Sr. Enrol.	% Fr. & Soph. Sr. Enrol.	
Colorado	1,681	516	30.7	1,165	69.3	1,909	587	30.7	1,322	69.3	1,867	585	31.3	1,282	68.7	1,618	500	30.9	1,118	69.1	30.9
Greeley	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Illinois	549	72	13.1	477	86.9	576	55	9.5	521	90.5	540	48	8.8	500	91.2	450	35	7.8	415	92.2	9.8
Charleston	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Macomb	662	131	19.8	531	80.2	816	106	13.0	710	87.0	726	100	13.8	626	86.2	660	76	11.5	584	88.5	14.5
Indiana	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Muncie	1,026	214	20.9	812	79.1	1,003	181	18.0	822	82.0	980	155	15.8	825	84.2	816	156	19.1	660	80.9	18.5
Terre Haute	1,455	321	22.1	1,134	77.9	2,431	659	27.1	1,772	72.9	235	558	23.7	1,793	76.3	2,314	535	23.1	1,779	76.9	24.0
Kansas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Emporia	1,353	276	20.4	1,077	79.6	3,234	797	24.6	2,437	75.4	3,186	738	23.2	2,448	76.8	3,704	671	18.1	3,033	81.9	21.6
Hays	606	157	25.9	449	74.1	566	164	29.0	402	71.0	503	129	25.6	371	74.4	464	103	22.2	361	77.8	25.7
Pittsburg	1,405	365	26.0	1,040	74.0	1,636	445	27.2	1,191	72.8	1,517	364	24.0	1,153	76.0	1,363	306	22.5	1,057	77.5	24.9
Michigan	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Kalamazoo	2,665	691	25.9	1,974	74.1	2,557	518	21.4	2,009	78.6	2,501	459	18.3	2,047	81.7	2,413	294	12.2	2,119	87.8	19.5
Marquette	706	99	14.0	607	86.0	709	73	10.3	636	89.7	726	57	7.9	660	92.1	.....	.....	.....	.....	.....	10.7
Mount Pleasant	921	143	15.5	778	84.5	904	130	14.4	774	85.6	955	124	13.0	831	87.0	913	113	12.4	800	87.6	13.8
Ypsilanti	2,364	555	23.5	1,809	76.5	2,200	433	19.7	1,767	80.3	2,415	377	15.6	2,038	84.4	2,572	346	13.5	2,226	86.5	18.1
Missouri	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cape Girardeau	491	127	25.9	364	74.1	726	185	25.5	541	74.5	717	159	22.2	558	77.8	745	172	23.1	573	76.9	24.2
Kirkville	698	255	36.5	443	63.5	814	352	41.7	492	58.3	920	345	37.5	575	62.5	804	294	36.6	510	63.4	38.1
Maryville	597	128	22.6	439	77.4	1,364	377	27.6	587	72.4	1,430	408	28.5	1,022	71.5	1,641	390	23.8	1,251	76.2	25.6
Springfield	841	264	31.4	577	68.6	2,255	481	21.3	1,774	78.7	2,419	850	35.2	1,564	64.8	2,434	426	17.5	2,008	82.5	26.4
Warrensburg	915	261	28.5	654	71.5	814	227	27.9	587	72.1	831	237	28.5	594	71.5	773	198	25.6	575	74.4	27.6
New Mexico	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
East Las Vegas	128	31	24.2	97	75.8	148	43	29.1	105	70.9	139	33	23.7	106	76.3	132	24	18.2	108	81.8	23.8
Silver City	143	40	28.0	103	72.0	130	95	73.1	35	26.9	107	77	72.0	30	28.0	78	53	67.9	25	32.1	60.3
South Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Aberdeen	652	87	13.3	565	86.7	750	117	15.6	633	84.4	766	112	18.5	624	81.5	632	90	14.2	542	85.8	15.4
Total	19,828	4,733	23.9	15,095	76.1	25,572	6,055	23.7	19,517	76.3	25,064	5,915	23.2	19,659	76.8	24,526	4,782	19.5	19,744	80.5	.....
Average	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Highest Inst.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Median Inst.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Lowest Inst.	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Graduate Enroll-ment	101	.....	.....	.....	.....	181	.....	.....	.....	.....	187	.....	.....	.....	.....	140	.....	.....	.....	.....	.....
% Grad. Enrollment of Grand Total	0.5%	.....	.....	.....	.....	0.7%	.....	.....	.....	.....	0.7%	.....	.....	.....	.....	0.6%	.....	.....	.....	.....	.....
Grand Total	19,929	.....	.....	.....	.....	25,753	.....	.....	.....	.....	25,791	.....	.....	.....	.....	24,666	.....	.....	.....	.....	.....

Table 39. Libraries and Laboratories in Twenty Teachers Colleges
—Summary (Standard No. 11)

	Number of Institutions Included	Median	Median of Highest ¼	Median of Lowest ¼
Number of volumes in library excluding public documents	20	24,315.00	63,500.00	16,025.00
Volumes per regular day student.....	20	28.10	50.30	13.40
Number of current periodicals received regularly exclusive of public documents.....	20	201.00	450.00	124.00
Amount appropriated for books and magazines in current academic (or calendar) year (1927-28 or 1927).....	19	\$5,400.00	\$8,363.00	\$3,000.00
Amount actually spent for books and magazines in preceding year	19	3,625.76	8,268.00	2,055.64
Amount per regular day student.....	19	3.62	13.91	1.67
Estimated replacement value of laboratory apparatus and equipment	18	30,625.00	49,572.00	14,869.32
Amount per regular day student.....	18	35.54	65.79	11.97
Amount budgeted for laboratory equipment and supplies	18	5,000.00	10,764.22	2,000.00

Table 40. Libraries and Laboratories—Significant Facts in Detail
(Standard No. 11)

Institution	Day School Enrollment 1926-27	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expendi- tures for Books and Magazines 1926-27	Per Capita Expendi- tures Reg. Day Student 1926-27	Lab. Replacement Value	Lab. Replacement Value Per Day Student 1926-27
Colorado							
Greeley	1,933	49,000	25.3	\$8,268.00	\$4.20	\$12,000.00	6.21
Illinois							
Charleston	576	29,000	50.3	3,005.89	5.22	20,500.00	35.59
Macomb	819	25,066	30.6	2,060.04	2.52	49,572.00	60.53
Indiana							
Muncie	1,009	20,000	19.8	5,583.66	5.53	30,300.00	30.03
Terre Haute.....	2,497	96,789	38.8	6,233.73	2.50	.....	.....
Kansas							
Emporia	3,308	67,000	20.3	6,000.00	1.81	36,103.00	10.91
Hays	568	16,833	29.6	2,055.64	3.62	31,648.75	55.72
Pittsburg	1,672	17,401	10.4	2,232.19	1.34	110,000.00	65.79
Michigan							
Kalamazoo	2,585	29,315	11.3	5,100.00	1.97	30,950.00	11.97
Marquette	709	23,262	32.8	2,045.96	2.89	14,869.32	20.97
Mount Pleasant..	904	16,000	17.7	14,000.00	15.49	34,500.00	38.16
Ypsilanti	2,200	63,500	28.9	1,140.00	.52	48,284.60	21.95
Missouri							
Cape Girardeau..	729	35,294	48.4	2,081.05	2.85	27,200.00	37.31
Kirksville	844	23,000	27.3	10,000.00	11.85	66,500.00	78.79
Maryville	1,410	21,650	15.4	2,350.36	1.67	30,200.00	21.42
Springfield	2,255	30,168	13.4	5,500.00	2.44	.....	.....
Warrensburg	823	33,338	40.5	5,000.00	6.08	40,000.00	48.60
New Mexico							
East Las Vegas	155	23,563	152.0	4,886.00	31.52	5,500.00	35.48
Silver City	156	8,673	55.6	2,169.55	13.91	21,000.00	134.62
South Dakota							
Aberdeen	750	16,025	21.4	3,625.76	4.83	16,729.81	22.31

Table 41. Finances

	Day School Enrollment	Total Acceptable Income	Per Capita Income
Colorado			
Greeley	1,732	\$472,234.96	\$272.65
Illinois			
Charleston	549	228,131.00	415.54
Macomb	666	246,264.57	369.77
Indiana			
Muncie	1,037	325,779.02	314.16
Terre Haute	1,462	495,803.45	339.12
Kansas			
Emporia	1,516	448,041.89	295.54
Hays	606	330,173.35	544.84
Pittsburgh	1,462	484,215.34	331.20
Michigan			
Kalamazoo	2,316	737,696.47	318.52
Marquette	711	282,667.00	397.56
Mount Pleasant	921	315,010.00	342.03
Ypsilanti	2,383	873,755.00	366.66
Missouri			
Cape Girardeau	493	289,464.79	587.15
Kirksville	698	262,837.50	376.56
Maryville	579	303,955.96	524.97
Springfield	978	432,727.16	442.46
Warrensburg ..	922	355,558.35	385.64
New Mexico			
East Las Vegas	140	108,123.00	772.31
Silver City	149	111,926.12	751.18
South Dakota			
Aberdeen	652	204,500.00	313.65
Low			272.65
High			772.31
Median			373.17

JUNIOR COLLEGES

Standard No. 1. Definition

"A standard junior college is an institution of higher education with a curriculum covering two years of collegiate work (at least sixty semester hours, or the equivalent in year, term, or quarter credits), which is based upon and continues or supplements the work of secondary instruction as given in any accredited four-year high school. A semester hour is defined as one period of class-room work in lecture or recitation extending through not less than fifty minutes net or their equivalent per week for

a period of eighteen weeks, two periods of laboratory work being counted as the equivalent of one hour of lecture or recitation."

While the first standard of the Association defines the junior college as an institution of higher education with a two-year curriculum, five of the institutions included in the approved junior college list in 1927 were actually four-year institutions: but only the first two years of work have been accredited by the Association. According to Table 42, all of the thirty-four institutions on the list meet the requirement of 60 semester hours for graduation, with 18 weeks to

Table 42. Definition of a Junior College (Standard No. 1)

1. Number of institutions meeting requirements of 60 semester hours for graduation.....	34—100%
2. Number of institutions with qualitative scholastic requirements for graduation	20—58.8%
3. Institutions allowing graduation with less than 60 semester hours because of high grades, regular attendance, or other circumstances:	
Highland Park.....	High Grades
4. Number of institutions with at least 18 weeks to the semester.....	34—100%
5. Net length of recitation period in minutes	
Highest	65
Median	55
Lowest	45
Institutions not meeting requirement of 50 minutes net for recitation periods:	
Frances Shimer	45
6. Number of students graduated with college work as follows, 1927:	
Four years	132
Three years	4
Two years	1932
One year	20
Less than one year	2

Table 43. Summary of Students Admitted to Junior Colleges, First Semester 1927-28 (Standard No. 2)

JUNIOR COLLEGES	Students Admitted	% of Total Number of New Students	Number of Institutions	% of Total Number of Institutions
Meeting Standards				
With 15 units as required.....	5,734	92.1	34	100
Not Meeting Standards				
A. With 14 units	243	3.9	15	44.1
B. With 13 units	37	.6	7	20.6
C. With less than 13 units.....	37	.6	4	11.8
Total regular students not meeting standards	317	5.1	18	52.9
D. Special students	176	2.8	20	58.8
Total all students (including specials) not meeting standards.....	493	7.9	27	79.4
Total	6,227		34	

Table 44. Admission—Junior Colleges Ranking in the Lowest Quartile Based on the Percentage of Conditioned Students Admitted (Standard No. 2)

INSTITUTIONS	Number of New Students Admitted	Number of Conditioned Students Admitted	% of New Students	Number of Special Students Admitted	% of Special Students Admitted	Total Number of Students Admitted Without Meeting Standards	% of Total Students Admitted Without Meeting standards
Bay City	103	4	3.9	5	4.8	9	8.7
Mason	74	3	4.1	—	—	3	4.1
Emmanuel	160	10	6.3	33	20.6	43	26.9
Stephens	381	28	7.3	11	2.9	39	10.2
Graceland	135	12	8.9	7	5.2	19	14.1
North Park	63	7	11.1	7	11.1	14	22.2
Elmhurst	51	8	15.7	6	11.8	14	27.5
Crane	1,207	215	17.8	12	1.0	227	18.8
Monticello	50	11	22.0	4	8.0	15	30.0

the semester. Only one reports class periods of less than the required 50 minutes.

Standard No. 2. Admission

"The junior college shall require for admission at least fifteen units of secondary work as defined by this Association, or the equivalent. These units must represent work done in a secondary school approved by a recognized accrediting agency or by the result of ex-

aminations. The major portion of the units accepted for admission must be definitely correlated with the curriculum to which the student is admitted."

The same requirements for admission apply to the junior colleges as to the colleges, and about the same percentage of non-conformity exists. Eighteen of the junior colleges (52.9%) have admitted 317 conditioned students, an average of 17.6 students per institution, compared with 16.3 for the colleges. Including

special students, 27 of the junior colleges have admitted 493 students not meeting the requirements, an average of only 18.2 as against 30.7 for the colleges.

college shall be graduation from a college belonging to this Association, or an equivalent, and, in addition, graduate

Standard No. 3. Organization

"The work of the junior college shall be organized on a college, as distinguished from high school, basis, so as to secure equivalency in prerequisites, scope and thoroughness to the work done in the first two years of a standard college as defined by this Association."

Table 45. Organization of the Junior College (Standard No. 3)

1. Number of institutions maintaining a secondary dept.	29
2. Institutions in which such secondary division is administered as part of the college organization:	
Elmhurst	
Emmanuel	
Frances Shimer	
Graceland	
Stephens	
3. Number of institutions in which such secondary division is accredited by North Central Association	29—100%

When junior colleges are inspected or reinspected, Standard No. 3 is considered very carefully by the visitor. Table 45 summarizes the information secured in the triennial reports. Five institutions reported that the secondary division is administered as a part of the college organization, a condition which is not looked upon favorably by the Association.

Standard No. 4. Faculty

"The minimum scholastic requirement of all teachers of classes in the junior

Table 46. Faculty Training, 1927-28 (Standard No. 4)

	Total Faculty	No. with Doctor's or Master's Degree	% with Doctor's or Master's Degree
Bay City	23	14	60.8
Broadview	12	5	41.6
Central	9	5	55.5
Central Y. M. C.			
A.	24	15	62.5
Christian	18	12	66.6
Crane	87	51	58.6
Elmhurst	19	11	57.8
Emmanuel	30	10	33.3
Flat River	6	6	100
Flint	23	11	47.8
Frances Shimer	22	9	40.9
Graceland	19	10	52.6
Grand Rapids	40	23	57.5
Hibbing	30	16	53.3
Highland Park	18	10	55.5
Joliet	22	13	59
Kansas City	46	30	65.2
Kemper	7	6	85.7
Mason	9	6	66.6
Monticello	10	8	80
Morton	29	11	37.9
Mount St. Charles	---	---	---
North Park	11	8	72.7
Northeastern Oklahoma	10	6	60
Panhandle Agric. & Mech.	16	13	81.2
Potomac	10	10	100
Principia	17	16	94.1
Regis	15	13	86.6
Rochester	9	8	88.8
St. Joseph	21	11	52.3
Stephens	62	42	67.7
Union	20	7	35
Virginia	20	8	80
William Woods	25	12	48
Total	739	436	58.9
Average	22.39	13.21	58.9
Highest			100
Median			60
Lowest			33.3

work in a university of recognized standing amounting to one year. The teaching schedule of instructors shall not exceed eighteen hours a week; fifteen hours is recommended as the maximum."

Table 47. Faculty Training—Junior Colleges Ranking in the Lowest Quartile, Based on the Percentage of the Faculty with Master's or Doctor's Degree (Standard No. 4).

	Per Cent
1. Graceland	52.6
2. St. Joseph	52.3
3. William Woods	48.0
4. Flint	47.8
5. Broadview	41.6
6. Frances Shimer	40.9
7. Morton	37.9
8. Union	35.0
9. Emmanuel	33.3

Table 48. Size of Classes in Junior Colleges, First Semester 1927-28 (Standard No. 5).

	Per Cent
Total Number of Classes	2212
A. Number of classes meeting North Central Association Standards	1794...81.1
1. Number of classes with 1-5 students	150...67.8
2. Number of classes with 6-10 students	309...13.5
3. Number of classes with 11-20 students	632...28.5
4. Number of classes with 21-30 students	703...31.7
B. Number of classes not meeting North Central Association Standards	418...18.9
1. Number of classes with 31-40 students	331...10.4
2. Number of classes with 41-50 students	76...34.3
3. Number of classes with 51-60 students	6... .27
4. Number of classes with over 60 students	5... .22

In Table 46 are presented comparative figures showing the percentage of the respective faculties with Master's or Doctor's degree. As will be noticed, the percentages vary from 33.3% to 100%, the median institution being only 60%. Even though full allowance be made for several factors which do not enter into this compilation, it would still seem that the junior colleges accredited by the Association are not meeting this standard to the extent which should be expected.

Standard No. 5. Size of Classes

"Classes, exclusive of lectures, of more than thirty students shall be interpreted as endangering education efficiency. Junior colleges having classes of larger size shall report the facts annually to the Commission."

Table 49. Size of Classes—Junior Colleges Ranking in the Lowest Quartile Based on the Percentage of Classes Over 30.

	Per Cent
1. Emanuel	12.6
2. St. Joseph	14.0
3. Graceland	14.3
4. Highland Park	18.4
5. Union	18.4
6. Potomac	20.6
7. Grand Rapids	21.3
8. Joliet	22.9
9. Crane	65.3

With a very few exceptions, the situation with reference to class sizes does not appear at all serious. According to Table 48, 18.9% of all the classes in the member junior colleges have more than 30 students, as compared with 16.1% in the colleges.

Table 50. Summary of Enrollment in Junior Colleges, First Semester, 1927-28

	Men	No. of Insts.	Women	No. of Insts.	Total	No. of Insts.
1. Regular day school enrollment						
a. Arts and Sciences	3,690	27	3,430	28	7,120	33
b. Teacher Training	57	6	438	18	495	14
c. Music	21	5	121	9	142	9
d. Art	4	1	28	2	32	2
e. Other	2,327	15	854	---	3,181	17
Total (including duplicates)....	6,099	29	4,871	29	10,970	34
Total (excluding duplicates)...	.....	.....	.....	.....	11,233	34
2. No. of special students included	216 students in 24 insts.					
3. Summer session	2,771 students in 9 insts.					
4. Part time						
a. Evening	1,133 students in 6 insts.					
b. Extension	15 students in 1 inst.					
c. Correspondence	0 students in 0 insts.					
d. Others	442 students in 11 insts.					
Total	1,590					
5. Elementary and Secondary students						
a. Academic or High School	11,486 students in 23 insts.					
b. Training School	136 students in 5 insts.					
c. Sub-Freshmen	18 students in 1 inst.					
e. Others	4,111 students in 6 insts.					
Total	15,751					
6. Total enrollment by classes for first semester for 1927-28, for 1926-27, and for 1925-26.						
	1927-28		1926-27		1925-26	
	No. of Students	%	No. of Students	%	No. of Students	%
Freshmen	6,939	67.6	6,838	68.5	6,125	69.0
Sophomores	3,316	32.4	3,150	21.5	2,749	31.0
Total	10,255	.....	9,988	.....	8,874	.....
Others	361	3.4	280	2.7	314	3.4
Grand Total	10,616	.....	10,268	.....	9,188	.....

Standard No. 6. Registration

"No junior college shall be accredited unless it has at least sixty students regularly registered in accordance with these standards. Of those enrolled at least one-third should be in the second year."

Since a registration of at least 60 students is required for original accrediting,

all of the institutions listed meet this part of the standard. It is significant, however, that 15 of the 34 junior colleges have reported less than one-third of the enrollment in the second year, based on a three year average. For the year of report, 1927-28 12 institutions have less than the specified one-third. In fact, the median is only 34%, while the lowest

Table 51. Summary of Junior College Enrollment by Institutions, First Semester, 1927-28

Institution	Total Full Time Day School	Summer School 1927	Evening Session	Extension Classes	Correspondence Work
Bay City	172	.....	.....	.....	.....
Broadview	114	24	.....	.....	.....
Central	114	.....	5	.....	.....
Central Y. M. C. A.	490	246	.....	.....	.....
Christian	219	.....	.....	.....	.....
Crane	2,933	1,766	535	.....	.....
Elmhurst	107	.....	.....	.....	.....
Emmanuel	339	116	.....	.....	.....
Flat River	112	87	.....	.....	.....
Flint	195	.....	.....	.....	.....
Frances Schimer	217	.....	.....	.....	.....
Graceland	221	.....	.....	.....	.....
Grand Rapids	702	55	207	.....	.....
Hibbing	260	.....	.....	.....	.....
Highland Park	544	.....	.....	.....	.....
Joliet	184	.....	20	.....	.....
Kansas	1,108	.....	346	.....	.....
Kemper	121	.....	.....	.....	.....
Mason	115	.....	.....	.....	.....
Monticella	88	.....	.....	.....	.....
Morton	220	.....	20	.....	.....
Mount St. Charles	64	.....	.....	.....	.....
North Park	127	.....	.....	.....	.....
Northeastern Okla.	180	.....	.....	.....	.....
Panhandle Agric. and Mech.	151	141	.....	.....	.....
Potomac	152	184	.....	.....	.....
Principia	127	.....	.....	.....	.....
Regis	155	.....	.....	15	.....
Rochester	160	.....	.....	.....	.....
St. Joseph	295	.....	.....	.....	.....
Stephens	532	.....	.....	.....	.....
Union	311	152	.....	.....	.....
Virginia	151	.....	.....	.....	.....
William Woods	253	.....	.....	.....	.....
Total	11,233	2,771	1,133	15	.....

institution has only 22.3%. Although the requirement is not mandatory, it seems evident that the junior colleges are losing too large a proportion of their students before the second year.

Standard No. 7. Libraries and Laboratories

"The junior college shall have a live, well distributed and efficiently administered library of at least 3,000 volumes,

exclusive of public documents, selected with special reference to college work and with a definite annual appropriation for the purchase of current books and periodicals. It is urged that such an appropriation be at least \$800. The junior college shall be provided with laboratories fully equipped to illustrate each course announced."

Tables 54 and 55 disclose a condition with respect to libraries and laboratories

Table 52. Percentage of Classified Junior College Enrollment in the Freshman Class and in the Sophomore Class for Year of Report and Two Preceding Years (Standard No. 6)

Institutions	1927-1928			1926-1927			1925-1926			Av. for 3 Yrs.		
	Classified Jr. Coll. Enrollment	First Year Students No.	Second Year Students No.	Classified Jr. Coll. Enrollment	First Year Students No.	Second Year Students No.	Classified Jr. Coll. Enrollment	First Year Students No.	Second Year Students No.	1st Yr. %	2nd Yr. %	
Bay City	170	113	66.5	57	33.5	156	113	72.4	43	27.6	70.2	29.8
Broadview	82	58	70.7	24	29.3	78	50	64.1	28	35.9	68.7	31.3
Central	114	61	53.5	53	46.5	118	71	60.2	47	39.8	55.4	44.6
Central Y. M. C. A.	488	348	71.3	140	28.7	354	267	75.4	87	24.6	77.7	22.3
Christian	219	145	66.2	74	33.8	203	112	55.2	91	44.8	61.2	38.8
Crane	2,883	2,110	73.2	773	26.8	2,959	2,720	74.3	759	25.7	72.9	27.1
Elmhurst	107	66	61.7	41	38.3	110	62	56.4	48	43.6	63.4	36.6
Emmanuel	223	137	61.4	86	38.6	.....	.....	.....	.....	.....	.....	.....
Flat River	112	70	62.5	42	37.5	89	63	70.8	26	29.2	67.2	32.8
Flint	216	145	67.1	71	32.9	194	135	69.6	59	30.4	68.4	31.6
Frances Shimer	123	82	66.7	41	33.3	129	88	68.2	41	31.8	70.0	30.0
Graceland	201	117	58.2	84	41.8	176	116	65.9	60	34.1	60.8	39.2
Grand Rapids	553	384	69.4	169	30.6	581	432	74.4	149	25.6	73.5	26.5
Hibbing	229	141	61.6	88	38.4	202	137	67.8	65	32.2	63.7	36.3
Highland Park	262	191	72.9	71	27.1	255	190	74.5	65	25.5	75.3	24.7
Joliet	184	122	66.3	62	33.7	207	155	74.9	52	25.1	70.9	29.1
Kansas	1,108	712	64.3	396	35.7	1,217	762	62.6	455	37.4	65.2	34.8
Kemper	121	94	77.7	27	22.3	102	76	74.5	26	25.5	76.2	23.8
Mason	115	72	62.6	43	37.4	117	76	64.9	41	35.1	61.5	38.5
Monticella	84	46	54.8	38	45.2	76	45	59.2	31	40.8	56.3	43.7
Morton	214	132	61.7	82	38.3	186	121	65.1	65	34.9	62.8	37.2
Mount St. Charles.....	64	41	64.1	23	35.9	70	42	60.0	28	40.0	62.2	37.8
North Park	127	64	50.4	63	49.6	122	70	57.4	52	42.6	59.9	40.1
Northeastern Okla.	180	120	66.7	60	33.3	185	115	62.2	70	37.8	63.5	36.5
Panhandle Agric. and Mech.	125	93	74.4	32	25.6	157	109	69.4	48	30.6	72.9	27.1
Potomac	152	110	72.4	42	27.6	148	108	73.0	40	27.0	73.6	26.4
Principia	126	81	64.3	45	35.7	129	74	57.4	55	42.6	63.5	36.5
Regis	117	77	65.8	40	34.2	107	70	65.4	37	34.6	66.3	33.7

Table 53. Percentage of Second-year Students—Junior Colleges in the Lowest Quartile Based on Three Year Average.

	Per Cent
1. Virginia	29.6
2. Joliet	29.1
3. Panhandle Agricultural & Mechanical	27.1
4. Crane	27.1
5. Grand Rapids	26.5
6. Potomac	26.4
7. Highland Park	24.7
8. Kemper	23.8
9. Central, Y. M. C. A.	22.3

\$20,000, of which not less than \$10,000 should be derived from stable sources other than students' fees, such as public support, permanent endowments, or income from permanent and officially authorized educational appropriations of churches and church boards or duly recognized corporations or associations. Such latter income shall be credited to the extent actually received, but to an amount not exceeding the average income from such appropriations for the preceding five years."

Table 54. Libraries and Laboratories, Junior Colleges—General Summary (Standard No. 7)

	Number of Institutions Included	Median	Median of Highest ¼	Median of Lowest ¼
Number of volumes in library excluding public documents	32	5,440	12,000	3,426
Volumes per regular day student.....	32	32.3	84.9	13.9
No. of current periodicals received regularly excluding public documents	30	53	93	33
Amount appropriated for books and magazines in current academic (or calendar year)	34	\$1,000.00	\$2,272.00	\$ 600.00
Amount actually spent for books and magazines in preceding year.....	31	794.00	2,000.00	460.00
Amount per regular day student.....	31	5.04	11.47	1.69
Estimated replacement value of laboratory apparatus and equipment	33	9,950.00	2,900.00	3,415.00
Amount per regular day student.....	33	57.97	138.20	13.47
Amount budgeted for laboratory equipment and supplies	30	1,500.00	4,750.00	675.00

which should receive serious attention by the institutions concerned. The problem is in no way simplified by the fact that in some cases these facilities are used in common by the junior college and the high school.

Table 56 has been prepared in the same manner as Table 20.

Standard No. 8. Finances

"The minimum annual operation income for the educational program of the junior college should be at least

From the statistical standpoint, the triennial figures concerning finances are perhaps less satisfactory than those pertaining to any other standard. Several institutions found it impossible to furnish the data at all; some could not separate the junior college from the high school; and some could not separate the junior college division from the senior college division. However, all supplied sufficient information to show that the standard was being complied with. In Table 58, the figures for acceptable in-

Table 55. Libraries and Laboratories—Significant Facts in Detail (Standard No. 7)

Institution	Day School Enrollment 1926-27	Volumes in Library	Volumes Per Regular Day Student 1926-27	Expenditures for Books and Magazines 1926-27	Per Capita Expenditures Reg. Day Student 1926-27	Lab. Replacement Value	Lab. Replacement Value Per Day Student 1926-27
Bay City	159	5,500	34.6	\$1,000.00	\$6.29	\$16,500.00	\$103.77
Broadview	81	12,898	159.2	943.00	11.64	9,950.00	122.84
Central	118	4,000	33.9	640.00	5.42	400.00	3.39
Central Y. M. C. A.	363	.....	.....	.....	.....	.....	.....
Christian	203	4,529	22.3	550.00	2.71	4,129.00	20.34
Crane	3,014	8,354	2.8	.....	.....	29,000.00	9.62
Elmhurst	100	9,093	90.9	2,651.00	26.51	13,876.00	138.76
Emmanuel	339	12,956	38.2	358.00	1.06	5,012.00	14.78
Flat River	89	5,357	60.2	878.00	9.87	2,700.00	30.34
Flint	194	3,000	15.5	500.00	2.58	26,700.00	137.63
Frances Shimer	129	6,174	47.9	740.00	5.74	6,176.00	47.88
Graceland	182	11,500	63.2	794.00	4.36	6,500.00	35.71
Grand Rapids	694	5,000	7.2	2,000.00	2.88	17,310.00	24.94
Hibbing	220	12,000	54.5	.....	.....	29,000.00	131.82
Highland Park	270	5,000	18.5	3,500.00	12.96	11,000.00	40.74
Joliet	207	5,325	25.7	1,298.00	6.27	42,000.00	202.90
Kansas	1,217	11,525	9.5	2,000.00	1.64	29,000.00	23.83
Kemper	102	3,123	30.6	1,208.00	11.84	10,500.00	102.94
Mason	117	4,035	34.5	700.00	5.98	8,500.00	72.65
Monticella	76	6,000	78.9	420.00	5.53	9,226.00	121.39
Morton	201	3,408	17.0	1,500.00	7.46	8,536.00	42.47
Mount St. Charles ..	70	4,704	67.2	250.00	3.57	9,750.00	139.29
North Park	122	6,344	52.0	1,000.00	8.20	8,700.00	71.31
Northeastern Okla.	185	3,600	19.5	800.00	4.32	7,000.00	37.84
Panhandle Agric. & Mech.	157	3,443	21.9	882.00	5.62	10,087.00	64.25
Potomac	148	4,200	28.4	225.00	1.52	1,800.00	12.16
Principia	129	12,000	93.0	4,764.00	36.93	9,986.00	77.41
Regis	139	18,000	129.5	700.00	5.04	43,600.00	313.67
Rochester	138	.....	.....	500.00	3.62	8,000.00	57.97
St. Joseph	366	5,380	14.7	637.00	1.74	18,550.00	50.68
Stephens	541	7,018	13.0	829.00	1.53	18,358.00	33.93
Union	205	9,716	47.4	717.00	3.50	17,871.00	87.18
Virginia	106	2,000	18.9	500.00	4.72	9,419.00	88.86
William Woods	216	6,350	29.4	600.00	2.78	290.00	1.34
Total	10,597	221,532	.....	34,084.00	.....	449,426.00	.....
Average	312	6,923	.....	1,099.00	.....	13,619.00	.....
High	3,014	18,000	159.2	4,764.00	36.93	43,600.00	313.67
Median	171	5,440	32.3	794.00	5.04	9,950.00	57.97
Low	70	2,000	2.8	225.00	1.06	290.00	1.34

Table 56. Libraries—Junior Colleges Ranking in the Lowest Quartile, Rated with Equal Weight to Volumes Per Regular Day Student and Expenditures for Books and Magazines Per Regular Day Student, 1926-27 (Standard No. 7)

	Per Cent
1. William Woods	73.3
2. Emmanuel	69.8
3. Christian	61.6
4. Potomac	59.2
5. Flint	49.8
6. St. Joseph	40.2
7. Grand Rapids	40.0
8. Stephens	35.4
9. Kansas City	31.1

Table 57. Laboratory Replacement Value Per Regular Day Student—Junior Colleges Ranking in the Lowest Quartile, 1926-27 (Standard No. 7).

1. Flat River	\$30.34
2. Grand Rapids	24.94
3. Kansas City	23.83
4. Christian	20.34
5. Emmanuel	14.78
6. Potomac	12.16
7. Crane	9.62
8. Central	3.39
9. William Woods	1.34

Table 58. Finances, Junior Colleges (Standard No. 8)

	Day School Enrollment First Semester 1927-28	Acceptable Incomes	Per Capita Income
Bay City	172	\$ 26,000.00	\$151.16
Broadview	114	45,190.51	396.40
Central	114	36,051.62	316.24
Central Y. M. C. A.	490	61,573.00	125.66
Christian	219	66,870.98	305.35
Crane	2,933	.....	.....
Elmhurst	107	45,544.68	425.65
Emmanuel	339	63,262.65	186.61
Flat River	112	22,307.00	199.17
Flint	195	27,412.02	140.57
Frances Shimer.....	217	97,956.99	451.46
Graceland	221	66,785.08	302.19
Grand Rapids.....	702	130,247.83	185.53
Hibbing	260	.....	.....
Highland Park	544	18,483.46	33.98
Joliet	184	43,559.96	236.74
Kansas	1,108	204,241.50	184.33

	Day School Enrollment First Semester 1927-28	Acceptable Incomes	Per Capita Income
Kemper	121	.....	.....
Mason	115	17,788.57	154.68
Monticella	88	.....	.....
Morton	220	79,201.50	360.00
Mount St. Charles	64	20,808.12	325.13
North Park	127	52,625.98	414.38
Northeastern Okla- homa	180	35,450.00	196.94
Panhandle Agric. & Mech.	151	40,065.00	265.33
Potomac	152	72,800.00	478.94
Principia	127	47,961.92	377.65
Regis	155	19,970.60	128.84
Rochester	160	24,000.00	150.00
St. Joseph	295	51,909.94	175.97
Stephens	532	276,036.34	518.86
Union	311	35,000.00	112.54
Virginia	151	41,000.00	271.52
William Woods	253	42,345.01	167.37
Total	11,233	.....	.....

Table 59. Finances—Junior Colleges Ranking in the Lowest Quartile Rated According to Per Capita Acceptable Income.

1. William Woods	\$167.37
2. Mason	154.68
3. Bay City	151.16
4. Rochester	150.00
5. Flint	140.57
6. Regis	128.84
7. Central Y. M. C. A.	125.66
8. Union	112.54
9. Highland Park	33.98

come are presented in as nearly accurate form as could be ascertained.

TEACHER-TRAINING INSTITUTIONS

Since the teacher-training list is to be discontinued in 1931, there seems no need for a detailed study to ascertain the extent to which these institutions meet the old standards. Twenty of them have been included in a special list following the colleges and universities.

Some of the more interesting facts pertaining to the others will be found in Tables 61-64.

Table 60. Composite List of Junior Colleges Which Are Low in Meeting the Various Standards.

Standard	1	2	3	4	5	6	7	7	8
Table	42	44	45	47	49	53	56	57	59
Bay City	†
Broadview	†	†	...
Central	†
Central Y M. C. A.	†	†
Christian	†	†	...
Crane	†	†
Elmhurst	†	†
Emmanuel	†	†	†
Flat River	†
Flint	†	†
Francis Shimer	†	...	†	†
Grand Rapids	†	†	†
Graceland	†	†	†
Highland Park	†	†	†
Joliet	†	†
Kansas City	†	†	...
Kemper	†
Mason	†
Monticello	†
Morton	†
North Park	†
Panhandle A. & M.	†
Potomac	†	†	†	...
Regis	†
Rochester	†
St. Joseph	†	†
Stephens	†	†
Union	†	†	†
Virginia	†
William Woods	†	†	†

Table 62. Teaching Hours, 1927-28, Teacher-training Institutions

TOTAL FACULTY	1228	Per Cent
A. Number meeting North Central Association Standards	698	56.8
1. Number teaching not more than 13 hours	279	22.7
2. Number teaching 14 or 15 hours	419	34.1
B. Number not meeting North Central Association Standards	530	43.2
1. Number teaching 16 or 17 hours	470	38.3
2. Number teaching over 17 hours	60	4.9
96 teachers from 16 institutions teach both collegiate and non-collegiate classes.		

Table 63. Size of Classes, 1927-28, Teacher-training Institutions

TOTAL NUMBER OF CLASSES		4042
A. Number of classes meeting North Central Association Standards		
		3067 75.9
1. Number of classes with 1-5 students		312 7.7
2. Number of classes with 6-10 student		585 14.5
3. Number of classes with 11-20 students		1080 26.7
4. Number of classes with 21-30 students		1090 27.0
B. No. of classes not meeting North Central Association Standards		
		975 24.1
1. No. of classes with 31-40 students		580 14.3
2. No. of classes with 41-50 students		277 6.9
3. No. of classes with 51-60 students		70 1.7
4. No. classes with over 60 students		48 1.2

Table 61. Summary of Students Admitted to Thirty-two Teacher-training Institutions, First Semester, 1927-28

	Students Admitted	% of Total Number of New Students	Number of Institutions	% of Total Number of Institutions
Meeting Standards				
With 15 units as required.....	10,889	96.6	32	100
Not meeting Standards				
With 14 units	102	.91	13	40.6
With 13 units	26	.23	6	18.8
With less than 13 units.....	21	.19	5	15.6
Total regular students not meeting standards.....	149	1.3	15	46.9
Special students	229	2.03	21	65.6
Total all students (including specials) not meeting standards	378	3.35	28	87.5
Total	11,267	.....	32	.....

Table 64 (Continued). Teacher-training Institutions, 1927-28

THE NORTH CENTRAL ASSOCIATION QUARTERLY

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Institutions	FACULTY—TRAINING					Total	FINANCE				
	No. with Degree or equivalent	No. with Degree or equivalent	No. with Bachelor's Degree or equivalent	No. with Less Than Bachelor's Degree	Receipts from Tuition, Fees, etc., for Fiscal Year		Income for the Current Fiscal Year for Salaries and Maintenance	Income for the Year—Bids, Repairs, Replacements	Total Interest Paid on Indebtedness During Fiscal Year	Maximum Salary of Heads of Departments	
Nebraska											
Chardon	1	17	13	1	32	22,819.54	154,000.00	100,000.00	.....	3,960.00
Kearney	1	16	30	5	52	34,141.77	199,000.00	20,000.00	.....	.....
Peru	0	16	21	3	40	15,300.00	165,000.00	.....	.....	3,360.00
Wayne	1	11	30	6	48	.....	.....	.....	.....	.....
New Mexico											
East Las Vegas, Silver City (See Special List Following Colleges)											
North Dakota											
Ellendale	0	13	8	7	28	13,591.20	63,995.48	965.21	.....	3,000.00
Mayville	2	11	9	10	32	145,562.00	142,435.00	2,000.00	.....	3,600.00
Minot .....	...	15	16	3	34	35,893.69	179,768.69	.....	.....	3,120.00
Valley City	4	29	23	3	59	79,022.07	223,452.07	24,000.00	.....	3,100.00
Ohio											
Bowling Green	7	24	19	12	62	26,511.43	551,936.49	150,005.00	.....	4,000.00
Cleveland	6	14	12	38	70	2,945.00	123,704.00	.....	.....	4,500.00
Kent	4	22	20	5	51	47,801.54	268,011.88	312,222.51	.....	3,600.00
Oklahoma											
Ada .....	...	27	22	0	49	1,157.50	182,000.00	126,000.00	.....	3,600.00
Alva	4	18	12	3	37	11,665.00	133,000.00	11,250.00	.....	3,600.00
Durant	4	24	30	2	60	23,775.39	182,000.00	135,000.00	.....	3,600.00
Edmond	1	21	24	0	46	45,362.29	182,000.00	125,000.00	.....	3,600.00
Tahlequah	3	18	10	0	31	38,751.16	141,500.00	134,500.00	.....	3,420.00
Weatherford	4	13	6	0	23	850.00	126,500.00	35,000.00	.....	3,300.00
South Dakota											
Aberdeen (See Special List Following Colleges)	4	14	8	0	26	22,274.46	125,200.00	.....	.....	3,600.00
Madison											
Wisconsin											
Superior	5	34	4	3	46	.....	213,920.00	30,000.00	.....	4,600.00

Table 64. Teacher-training Institutions, 1927-28

Institutions	FACULTY—TRAINING				Total	Receipts from Tuition, Fees, etc., for Fiscal Year	Income for the Current Fiscal Year for Salaries and Maintenance	Income for the Current Fiscal Year—Bldgs., Land, Repairs, Replacements	Total Interest Paid on Indebtedness During Fiscal Year	Maximum Salary of Heads of Departments
	No. with Doctor's Degree or equivalent	No. with Master's Degree or equivalent	No. with Bachelor's Degree or equivalent	No. with Bachelor's Degree Less Than Bachelor's Degree						
Colorado										
Greeley (See Special List Following Colleges)										
Gunnison	8	28	12	0	48	\$37,498.70	\$193,493.21	\$ 56,244.11	.....	\$ 4,500.00
Illinois										
Carbondale	4	24	24	21	73	23,991.00	250,472.00	246,100.00	.....	4,200.00
Charleston, Macomb (See Special List Following Colleges)										
De Kalb	1	20	31	13	65	19,200.00	214,743.00	225,000.00	.....	3,900.00
Normal	10	47	20	15	92	48,588.00	327,302.00	259,600.00	.....	4,680.00
Indiana										
Muncie, Terre Haute (See Special List Following Colleges)										
Iowa										
Cedar Falls	22	77	67	9	175	283,654.00	751,750.00	10,000.00	.....	4,200.00
Kansas										
Emporia, Hays, Pittsburg (See Special List Following Colleges)										
Michigan										
Detroit	4	17	32	95	148	61,532.00	286,635.00	.....	.....	4,500.00
Kalamazoo, Marquette, Mt. Pleasant, Ypsilanti (See Special List Following Colleges)										
Minnesota										
Moorhead	3	15	14	5	37	13,203.00	131,500.00	23,206.00	.....	3,300.00
St. Cloud .....	...	16	25	9	50	16,936.84	164,761.93	8,000.00	.....	3,850.00
Winona	1	9	12	3	25	9,842.89	144,226.58	9,500.00	.....	3,600.00
Missouri										
Cape Girardeau, Kirksville, Maryville, Springfield, Warrensburg (See Special List Following Colleges)										
Jefferson City	1	11	9	2	23	7,054.46	110,350.00	7,500.00	.....	3,200.00
Kansas City	2	15	1	1	19	13,554.00	.....	.....	.....	3,450.00
St. Louis	7	16	4	0	27	3,131.29	127,000.00	.....	.....	5,000.00
Montana										
Dillon	1	15	22	0	38	28,700.00	132,190.00	5,780.00	.....	3,600.00

Table 64 (Continued). Teacher-training Institutions, 1927-28

STUDENT ENROLLMENT

Institutions	Number of Students With at Least 15 Units for Admission, Enrolled on Date of Report, Since September by Classes										Total Student Enrollment								
	Short Course		2 Yr. Course				Four Year Course				Conditioned Students	Sept., 1925-June, 1926		1st Six Weeks		Summer, 1926			
	1st	2nd	1st	2nd	3rd	4th	Men	Women	Men	Women		Men	Women	Men	Women				
	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total			
Colorado																			
Greeley (See Special List Following Colleges)																			
Gunnison	135	85	77	72	36	43	3	174	313	487	109	597	706	92	437	529			
Illinois																			
Carbondale																			
Charleston, Macomb (See Special List Following Colleges)																			
De Kalb	370	161			23	16		123	494	617	72	698	770	32	326	358			
Normal	552	289	231	151	110	89	10	335	1,147	1,482	374	2,262	2,636	716	786	1,002			
Indiana																			
Muncie, Terre Haute (See Special List Following Colleges)																			
Iowa																			
Cedar Falls	50	878	486	381	238	278	134	125	760	2,287	3,047	489	3,434	3,923					
Kansas																			
Emporia, Hays, Pittsburg (See Special List Following Colleges)																			
Michigan																			
Detroit	31	390	438					3	32	937	1,019	110	985	1,095					
Kalamazoo, Marquette, Mt. Pleasant, Ypsilanti (See Special List Following Colleges)																			
Minnesota																			
Moorhead		234	181						61	536	597	23	480	443					
St. Cloud		725	608						119	671	790	48	638	686					
Winona		254	203					1	100	550	650			263					
Missouri																			
Cape Girardeau, Kirksville, Maryville, Springfield, Warrensburg (See Special List Following Colleges)																			
Jefferson City	24	24	34	25	25	16	7	78	100	178	21	89	101						
Kansas City	80	73	58				1		317	317	48	324	372						
St. Louis		88	112	30	49	31		20	960	980	20	489	509						
Montana																			
Dillon		312	208				3	2	76	589	665	44	544	588					

Table 64 (Continued). Teacher-training Institutions, 1927-28

Institutions	STUDENT ENROLLMENT																	
	Number of Students With at Least 15 Units for Admission, Enrolled on Date of Report, Since September by Classes										Total Student Enrollment							
	Short Course		2 Yr. Course		Four Year Course				Conditioned		Sept., 1925-June, 1926		1st Six Weeks		Summer, 1926			
	1st	2nd	1st	2nd	1st	2nd	3rd	4th	Students	Men	Women	Total	Men	Women	Total	Men	Women	Total
Nebraska																		
Chardon	180	75	.....	35	29	23	24	24	126	241	367	84	461	545	70	345	415	
Kearney	55	140	81	215	70	53	49	11	178	553	731	.....	.....	.....	144	1,069	1,213	
Peru	219	165	.....	52	63	1	1	156	311	467	108	613	721	67	341	408		
Wayne	320	180	.....	90	20	40			.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico																		
East Las Vegas, Silver City (See Special List Following Colleges)																		
North Dakota																		
Ellendale	62	30	.....	12	7	3	3	38	100	138	54	227	281	28	129	157		
Mayville	147	83	.....	17	12	.....	.....	65	234	299	61	460	521	33	336	369		
Minot	316	190	.....	27	15	36			.....	.....	.....	.....	917	.....	.....	630		
Valley City	364	270	.....	71	37	7		157	713	870	134	1,255	1,365	113	917	1,030		
Ohio																		
Bowling Green	320	154	156	111	54	35	1	231	633	864	28	179	207	74	824	898		
Cleveland .....	.....	.....	84	109	48	.....	.....	.....	560	560	396	1,345	1,741	.....	.....	.....	.....	.....
Kent	242	160	95	48	46	36	3	241	933	1,194	224	1,725	1,949	188	861	1,049		
Oklahoma																		
Ada .....	.....	.....	447	326	247	147	.....	396	849	1,245	.....	.....	.....	426	1,619	2,045		
Alva	194	100	.....	117	73	20	.....	230	345	575	.....	.....	.....	256	477	733		
Durant	70	274	138	127	164	65	64	29	292	854	1,146	744	1,493	2,237	.....	.....	.....	.....
Edmond .....	.....	.....	471	289	111	111	4	251	756	1,007	462	1,278	1,740	.....	.....	.....	.....	.....
Tahlequah	175	140	198	167	109	63	17	172	338	510	626	945	1,571	.....	.....	.....	.....	.....
Weatherford .....	.....	.....	319	174	67	59	622	160	335	495	335	682	1,017	.....	.....	.....	.....	.....
South Dakota																		
Aberdeen (See Special List Following Colleges)																		
Madison	156	55	26	20	19	20	3	81	270	351	37	329	366	11	114	125		
Wisconsin																		
Superior	122	136	173	113	65	50		.....	.....	798	.....	.....	528	.....	.....	.....	.....	.....

Table 64 (Continued). Teacher-training Institutions, 1927-28

Institutions	STUDENT ENROLLMENT							Misc.	
	Registration in							No. of Weeks	Recitation Period in Minutes
	Evening Session	Extension Classes	Correspondence Courses	Other Part-Time Students	Academy or High School	Training School (Teachers)	Sub-Freshman Class	Regular Academic Year	
							Other Elementary Secondary School Students	Summer Session	
Colorado									
Greeley (See Special List Following Colleges)									
Gunnison	113	140	9	.....	16	.....	36	50
Illinois									
Carbondale	114	.....	.....	.....	893	.....	36	40
Charleston, Macomb (See Special List Following Colleges)									
De Kalb	666	460	.....	36	50
Normal	517	294	.....	.....	1,323	.....	36	45
Indiana									
Muncie, Terre Haute (See Special List Following Colleges)									
Iowa									
Cedar Falls	492	220	20	.....	372	.....	36	55
Kansas									
Emporia, Hays, Pittsburg (See Special List Following Colleges)									
Michigan									
Detroit	3,251	.....	.....	.....	4,960	.....	36	50
Kalamazoo, Marquette, Mt. Pleasant, Ypsilanti (See Special List Following Colleges)									
Minnesota									
Moorhead	27	.....	.....	.....	380	.....	36	55
St. Cloud	17	.....	36	55
Winona	15	.....	.....	.....	324	1	36	50
Missouri									
Cape Girardeau, Kirksville, Maryville, Springfield, Warrensburg (See Special List Following Colleges)									
Jefferson City	5	15	.....	.....	199	.....	36	55
Kansas City	774	.....	2	.....	2,480	.....	40	50
St. Louis	57	.....	40	55
Montana									
Dillon	69	409	.....	.....	57	.....	36	50

Table 64 (Continued). Teacher-training Institutions, 1927-28

Institutions	STUDENT ENROLLMENT						Registration in		Other Elementary Secondary School Students	Misc.	
	Evening Session	Extension Classes	Correspon- dence Courses	Other Part Time Students	Academy or High School	Training School (Teachers)	Sub- Freshman Class	No. of Weeks		Recitation Period in Minutes	
								Regular Academic Year			Summer Session
Nebraska											
Chardon	.....	.....	54	8	.....	274	.....	.....	36	12	50
Kearney	.....	60	212	51	.....	323	.....	.....	36	12	55
Peru	.....	66	99	.....	.....	165	.....	.....	36	12	50
Wayne	.....	.....	120	14	.....	134	.....	.....	36	12	50
New Mexico											
East Las Vegas, Silver City (See Special List Following Colleges)											
North Dakota											
Ellendale	.....	.....	13	44	118	237	.....	52	36	12	50
Mayville	.....	6	65	85	19	143	.....	.....	36	12	55
Minot	.....	.....	146	4	58	9	.....	322	36	12	55
Valley City	.....	.....	291	78	.....	319	.....	.....	36	12	55
Ohio											
Bowling Green	.....	.....	.....	.....	.....	1,316	.....	.....	36	12	50
Cleveland	2,116	.....	.....	.....	.....	1,295	.....	.....	38	6	50
Kent	.....	1,100	180	.....	.....	495	.....	.....	35	11	50
Oklahoma											
Ada	52	268	467	.....	.....	214	.....	.....	36	9	50
Alva	.....	30	277	.....	.....	362	.....	.....	36	9	55
Durant	.....	419	351	.....	.....	235	.....	.....	36	9	53
Edmond	18	136	321	.....	.....	259	.....	.....	36	9	50
Tahlequah	.....	533	412	.....	.....	664	.....	.....	36	9	60
Weatherford	.....	358	560	.....	.....	757	.....	.....	36	9	55
South Dakota											
Aberdeen (See Special List Following Colleges)			37	.....	.....	397	.....	.....	36	12	50
Madison	.....	.....	.....	.....	.....	.....	.....	.....
Wisconsin											
Superior	12	.....	110	.....	.....	296	.....	.....	36	6	50

Table 64 (Continued). Teacher-training Institutions, 1927-28

LIBRARIES AND LABORATORIES					Replacement Value of Laboratory Apparatus			
Institutions	Number of Volumes	Number of Periodicals	Appropriated for Books and Magazines Current Year	Amount Spent for Books and Magazines Preceding Year	Chem.	Physics	Biog.	Others
Colorado								
Greeley (See Special List Following Colleges)								
Gunnison	12,958	95	\$2,500.00	\$3,030.00	\$6,000.00	\$5,500.00	\$4,500.00	.....
Illinois								
Carbondale	29,000	.....	3,150.00	2,053.00	14,000.00	8,000.00	32,000.00	.....
Charleston, Macomb (See Special List Following Colleges)								
De Kalb	29,586	123	.....	1,821.00	5,000.00	7,000.00	6,920.00	.....
Normal	35,089	202	5,000.00	3,792.00	7,749.00	5,119.00	8,943.00	.....
Indiana								
Muncie, Terre Haute (See Special List Following Colleges)								
Iowa								
Cedar Falls	90,000	386	14,336.00	17,748.00	10,000.00	7,500.00	23,000.00	\$10,000.00
Kansas								
Emporia, Hays, Pittsburg (See Special List Following Colleges)								
Michigan								
Detroit	27,557	125	5,000.00	5,000.00	.....	.....	1,200.00	3,000.00
Kalamazoo, Marquette, Mt. Pleasant, Ypsilanti (See Special List Following Colleges)								
Minnesota								
Moorhead	18,366	115	1,750.00	2,047.00	.....	.....	.....	.....
St. Cloud	20,963	184	3,834.00	3,425.00	.....	.....	763.00	.....
Winona	11,263	108	1,700.00	1,700.00	.....	.....	8,400.00	.....
Missouri								
Cape Girardeau, Kirksville, Maryville, Springfield, Warrensburg (See Special List Following Colleges)								
Jefferson City	3,260	200	1,500.00	2,000.00	5,500.00	4,300.00	4,000.00	.....
Kansas City	8,700	52	1,000.00	1,000.00	.....	.....	3,000.00	.....
St. Louis	12,000	61	1,200.00	1,200.00	8,000.00	10,000.00	12,000.00	.....
Montana								
Dillon	19,500	73	1,200.00	1,936.00	1,125.00	1,381.00	846.00	.....

Table 64 (Continued). Teacher-training Institutions, 1927-28

LIBRARIES AND LABORATORIES								
Institutions	Number of Volumes	Number of Periodicals	Appropriated for Books and Magazines Current Year	Amount Spent for Books and Magazines Preceding Year	Replacement Value of Laboratory Apparatus			
					Chem.	Physics	Biog.	Others
Nebraska								
Chardon	9,369	113	2,376.00	1,439.00	5,000.00	4,000.00	2,000.00	.....
Kearney	21,232	160	2,525.00	4,629.00	.....	.....	10,000.00	24,600.00
Peru	35,630	195	3,000.00	2,798.00	5,000.00	5,000.00	6,000.00	.....
Wayne	16,000	150	.....	.....	.....	.....	.....	.....
New Mexico								
East Las Vegas, Silver City (See Special List Following Colleges)								
North Dakota								
Ellendale	7,080	114	1,000.00	619.00	2,000.00	2,200.00	1,800.00	1,500.00
Mayville	12,600	100	1,000.00	2,000.00	1,200.00	.....	800.00	.....
Minot	11,500	160	1,500.00	2,451.00	3,000.00	3,000.00	2,000.00	.....
Valley City	18,290	140	2,000.00	1,700.00	4,500.00	4,800.00	.....	3,200.00
Ohio								
Bowling Green	22,000	78	14,000.00	6,000.00	7,470.00	1,447.00	15,000.00	4,500.00
Cleveland	15,675	52	2,000.00	2,114.00	.....	.....	1,400.00	.....
Kent	34,500	150	15,000.00	5,650.00	2,800.00	2,250.00	3,000.00	.....
Oklahoma								
Ada	13,369	181	4,600.00	4,055.00	5,000.00	3,800.00	4,500.00	2,500.00
Alva	17,500	101	1,200.00	1,142.00	4,500.00	4,500.00	7,500.00	2,500.00
Durant	9,055	152	5,000.00	2,412.00	3,000.00	1,500.00	2,000.00	.....
Edmond	19,000	135	5,000.00	2,500.00	700.00	500.00	300.00	.....
Tablequah	7,000	90	3,000.00	2,081.00	2,800.00	4,200.00	3,000.00	.....
Weatherford	10,000	110	1,500.00	1,100.00	3,500.00	4,000.00	4,500.00	.....
South Dakota								
Aberdeen (See Special List Following Colleges)								
Madison	9,716	95	1,750.00	764.00	3,100.00	1,650.00	4,300.00	.....
Wisconsin								
Superior	16,200	87	2,000.00	2,000.00	5,000.00	4,500.00	1,500.00	.....

Report of the Committee on Standards for Use in the Reorganization of Secondary School Curricula

The General Report

The Committee on Standards for use in the reorganization of secondary school curricula presented printed reports to the Association at its meetings in 1921, 1927 and 1928. The committee presents at this time an additional report of its work during the past year. The report consists of three parts, namely: I. A

brief summary of the work previously reported. II. The sub-committee on extra-curricula activities submits a report on the qualitative aspects of the problem. III. The sub-committee on Physics makes a report on the results of a tentative experiment which endeavors to determine quantitative standards.

I. Qualitative Standards

Up to this year the major effort of the committee has had to do with the setting up of qualitative standards for reorganizing secondary school curricula. From the beginning the committee has insisted that *qualitative standards* must first be determined. In the opinion of the committee quantitative standards can be ascertained only on the basis of qualitative standards. For this reason the committee has delayed its efforts in regard to determining quantitative standards.

Due to some inquiries that have come to the committee, it is felt that some readers of our reports misunderstand the point of view of the committee. It should be borne in mind that the reports of the various sub-committees furnish material which can be used in accomplishing the qualitative standards set up by this committee. Should one read a report of any one sub-committee without having clearly in mind the pattern which the report is following, it is feared a misunderstanding will arise. To those interested in these

reports it is suggested that the General Report of the Committee published in the Quarterly for March 1927 be read in conjunction with any report of any sub-committee.

A brief summary of the qualitative standards follows:

Your committee believes that much of real practical value is contained in its recent reports to the Association. The technique and procedure of these reports is worthy of careful study. In doing this the teacher will find much that he can apply in furthering the accomplishing of the objectives of his teaching.

The report presents a rather thorough analysis of the objectives of junior and senior high school education. Various subjects of the curriculum are analyzed by experts in these fields, in the endeavor to show how these subjects can contribute to the accomplishment of the objectives set up in this report. The subjects analyzed are as follows: English, French, Latin, General Science, Biology, Physics,

Chemistry, German, Spanish, Agronomy, Music, Art, Extra-curricular activities, Social Studies, Home Economics, Physical Education, Mathematics.*

Certain fundamental principles underlying any reorganization of the curriculum are set forth by the committee making this report.

In the view of this committee, secondary curricula need a thorough reorganization, not merely a patching up here and there. Material should be retained only when it has superior value to anything which might take its place. New material, in many instances, should be brought in but it should be subjected to most careful scrutiny to insure its largest value. Curriculum making, in the last analysis, is a process of determining the activities, ideals, interests, and attitudes possessing the largest relative values and of selecting the content furnishing the best medium for these activities.

One outstanding need apparently at the present time is an analysis of the inclusive objectives generally agreed upon and a statement in detail of their meaning and purpose. The goals as generally stated are proper objectives, but they do not in themselves point out with sufficient clearness the more immediate objectives which must control educational practice. It is the purpose, therefore, of this committee to suggest in some detail the more definite goals which must guide our practice.

It is obvious that a clear determination of objectives is always fundamental in the process of curriculum making. It is

also evident, if these objectives are to function properly, they must be stated in terms sufficiently definite to serve two purposes: *first*, as standards by which accurate evaluation can be made of material now in use; and *second*, serve as criteria for determining, constructively, necessary changes in subjects, subject matter and organization.

The goals of secondary education are considered under two heads: *first*, the ultimate goals toward which all our educational endeavor is directed; and *second*, the more specific objectives which serve directly as guides in the selection of subject matter and in determining emphasis and neglect in teaching.

In the selection and adaptation of materials this committee states that the following three facts should be considered: *first*, that there are certain common needs of all high school students which must be met by certain subjects, types of subject matter, and activities common to all curricula; *second*, that differentiation in subjects and subject matter is determined,—(a) by needs of various pupil groups within the school and (b) by needs of the various individuals within the several groups; *third*, that the organization of curricula, as this organization relates to units of instruction and to the sequence of these units, should be in accord with the nature and sequence of these objectives. Briefly stated, this means that the developmental character of needs, interests and abilities requires corresponding adaptation secured through proper curricula selection and organization.

Commendable progress, already made in securing better adaptation of curricula through differentiation in subjects and subject matter, should be carried forward until group and individual differences are adequately provided for. This, however,

*Report of Committee on Standards for Use in the Reorganization of Secondary School Curricula, North Central Association Qr. March, 1927 and March, 1928. For copies of report, write Prof. C. O. Davis, Univ. of Mich., Ann Arbor, Mich. Send 10c for copy of report on any one subject, or send 50c for copy of 1927 or 1928 report. Send \$1.00 for copy of entire report.

cannot be accomplished successfully unless four things are taken into account: First, there must be better adaptation of curricula to the common needs, interests and capacities of students. Second, differentiated needs require more accurate determination than now obtains. Third, types of knowledge to be acquired, nature of habits to be developed, kinds of attitudes and types of skills to be secured must be determined on a basis of these needs. Fourth, these needs must serve as criteria for the selection of subjects, subject matter and activities which constitute differentiated curricula.

In presenting the objectives of secondary education this Committee makes the following statement: The ultimate objectives presented are closely related. Many leisure time activities are distinctly social in character. It is therefore obvious that any attempt to define these objectives in detail will result in duplication of statement. A similar relation is found between all four ultimate objectives. Such occurs in the following analysis and in the view of the Committee it is desirable.

It should be understood that the following is in no sense considered to be the only and final way of determining objectives of secondary education. The Committee has set up a technique of procedure and has endeavored to carry out this procedure in application to the various subjects.

A digest of the objectives follows:

THE HEALTH ULTIMATE OBJECTIVE

To secure and maintain a condition of personal good health and physical fitness.

Amplified in terms of dispositions and abilities, this objective is as follows:

1. To develop in individuals correct health practices, and daily habits of indoor, and of outdoor exercise, and of relaxation, which assist in the maintenance of bodily vigor and vitality.

2. To develop a life-long desire for participation in wholesome activities, and to develop wholesome and intelligent attitudes toward the necessity for recreation and systematic exercise, in case of all individuals and all kinds of activities sponsored in community centers.

3. To prevent and correct ill health and bodily defects, and to maintain freedom from bodily handicaps in individuals.

Immediate Objectives for purposes of accomplishing the above ultimate objective in classroom procedure are as follows:

A. Acquiring fruitful knowledge.

1. Preparatory to acquiring other knowledge.

a. Knowledge of facts which are important with reference to correct habits of one's everyday physical life, some of which are based upon practical physiology and hygiene.

2. Knowledge functioning directly in developing dispositions and in discovering and developing abilities.

a. Knowledge of the fact that health is an inclusive term involving the entire organism which functions toward the realization of moral and social and physical ends.

3. Knowledge useful in the control of situations of everyday life.

a. Knowledge of definite means and ways through which one's physical efficiency and organic vigor may be developed to, and maintained upon, the highest level.

B. Developing interests, motives, ideals, attitudes and appreciations.

1. Development of an interest in personal hygiene, as for example, the care of the teeth, eyes, ears, nose and throat; the correction of weak and flat feet or of incorrect general bodily posture.

C. Development of mental techniques in memory, imagination, judgment, and reasoning.

1. The ability to pass judgment upon certain rules and regulations pertaining to individual health and to respective games.

D. Acquiring right habits of conduct and useful skills in living.

1. The habit of engaging in one or more games and sports easily carried on in later life.

THE LEISURE TIME ULTIMATE OBJECTIVE

To use leisure time in right ways.

Amplified in terms of dispositions and abilities, this objective is as follows:

1. To express in leisure time activities the nobler emotions, such as courage, altruism, aesthetic feeling, reverence and loyalty to one's home, community and country.

2. To secure wholesome recreation and relaxation through games, sports, travel, good literature, the fine arts, conversation, and hobbies.

3. To be socially helpful through avocational activities in the home, church and community.

Immediate Objectives for purposes of accomplishing the above ultimate objective in classroom procedure are as follows:

A. Acquiring fruitful knowledge.

1. Preparatory to acquiring other knowledge.

a. Elementary knowledge of nature and her laws, essential to general intelligence as related to an understanding and appreciation of physical environment.

2. Knowledge which functions directly in developing dispositions and in discovering and developing abilities.

a. Games and sports, through acquaintance with types, rules, and purposes thereof.

3. Knowledge useful in the control of situations of everyday life.

B. Developing attitudes, interests, motives, ideals and appreciations, such as: Openmindedness, cheerfulness, respect for authority, unselfishness, patriotism, sportsmanship, play interest, social helpfulness, honesty, purity, reverence, love of beauty, etc.

C. Developing mental techniques in memory, imagination, judgment and reasoning, such as:

1. Ability to distinguish worthy, unworthy, and indifferent types of leisure time activities: e. g., good, bad, and indifferent reading, good, bad and indifferent entertainment.

D. Acquiring right habits of conduct and useful skills in living, through participation in:

1. Various games and sports, including outdoor and indoor activities.

THE SOCIAL ULTIMATE OBJECTIVE

To sustain successfully certain definite social relationships such as civic, domestic, community, and the like.

Amplified in terms of dispositions and abilities, this objective is as follows:

1. To have due personal regard for the rights of others in all personal contacts and relationships and a proper sense of social obligations.

2. To recognize the proper relationship of individuals within a single group.

3. To recognize the proper relationships of one group to another.

4. To be socially efficient through participation in varied modes of group activities.

Immediate Objectives for purposes of accomplishing the above ultimate objective in classroom procedure are as follows:

A. Acquiring fruitful knowledge.

1. Preparatory to acquiring other knowledge.

a. Acquaintance with events, persons, movements, customs, and institutions which have determined the progress of mankind.

2. Knowledge which functions directly in developing dispositions and in discovering and developing abilities.

a. The biographies of great historical figures and significant facts about lesser leaders.

3. Knowledge useful in the control of situations of everyday life.

a. The operation of principle of cause and effect in social phenomena.

B. Development of attitudes, interests, motives, ideals and appreciations.

1. Openmindedness, steadiness, reverence, friendliness, cheerfulness, readiness to cooperate, respect for authority,

unselfishness, sympathy, tolerance, service, honesty, truthfulness, justice, loyalty, purity, love of the beautiful.

C. Developing mental techniques in memory, imagination, judgment and reasoning.

1. Ability in selective recall of one's historical knowledge of those elements that are pertinent to present social and civic problems.

D. Acquiring right habits of conduct and useful skills in living such as habits of self-control, self-reliance, initiative, punctuality, logical thinking, sociability, religious observance, performance of duty, skill in leadership in social relations, home-membership, diversity in leisure activity, social communication.

The full Committee making this report consists of the following individuals:

J. A. Clement	B. C. Lawson
F. D. Curtis	F. E. Clark
C. O. Davis	E. R. Downing
T. M. Deam	J. M. Hughes
J. E. Foster	Thomas J. Kirby
T. W. Gosling	R. L. Lyman
A. W. Hurd	W. C. Reavis
W. H. Lancelot	Raleigh Schorling
Miss Olivia Pound	R. M. Tryon
H. H. Ryan	M. H. Willing
H. L. Smith	W. G. Whitford
J. E. Stout	L. W. Webb,
G. W. Willett	Chairman

II. Report of Sub-committee on Extra-curricular Activities

The problem of the sub-committee* on secondary school extra-curricular activities has been three-fold:

(1) *To list the specific things which pupils do in various extra-curricular activities*

(2) *To evaluate the specific pupil activities in terms of the North Central Association objectives*

(3) *To cite references to helpful literature on the extra-curricular activities*

The sub-committee found it essential at the outset to classify the extra-curricular activities into types. There are, of course, numerous ways of doing this, as a survey of the literature of the field readily shows; but the sub-committee sought a grouping that should at once be practical for use by school principals and teachers, as clearly divisive as possible between types, and without unnecessary explicit or implied pre-judgment of value. The twelve types finally decided upon are named and defined at the head of the report proper. They are primarily just

the types that are recognized in practical school usage. They are named as school people ordinarily name them, that is, by indicating a commonly understood function or generic characteristic. This classification does not obviate the overlapping or duplication of the specific activities identified in the various types, but these defects were also present in no less degree in all the other schemes discovered and suggested by the members of the sub-committee. In the analyses that follow, actual repetition of specific activities has been reduced to a minimum, first, by segregating certain activities of deliberation and discussion, study and investigation, organization, and promotion common to several types; and subsequently, by cross reference.

The analysis of each of the types into specifics was carried out by consulting the literature in the field, the records of experiences of high school pupils and graduates, the special reports of individual students and committees in educational classes, and the directors of such activities themselves.**

*Members of the *sub committee*: Thomas M. Deam, Assistant Superintendent of the Joliet Township High School and Junior College, Joliet, Illinois, *Chairman*; Dr. M. H. Willing, Associate Professor of Education, University of Wisconsin, Madison, Wisconsin; Mr. W. C. Baer, Principal of the High School, Danville, Illinois; Miss Lura Blackburn, Oak Park and River Forest Township High School, Oak Park, Illinois; Mr. F. D. Frisbie, New Trier Township High School, Winnetka, Illinois.

Assisting in listing the specific activities: Prof. J. A. Clement's graduate class, Summer School 1928, University of Illinois, Urbana, Illinois; Prof. W. C. Reavis' graduate class, Summer School 1928, University of Chicago, Chicago, Illinois; Prof. W. W. Patty's graduate class, Summer School 1928, University of Indiana; Prof. G. W. Kefauver, University of Minnesota, Summer School 1928; Miss Jessie Hamilton of the Morey Junior High School, Denver Colorado, a class in the Summer School, Colorado State Teachers' college, Greeley, Colorado.

**Graduate students: Floyd C. Cain; A. Jansen; E. O. Morsted; D. Weir; N. R. Baker, Alabama State High School Supervisors; A. D. Kaufman, Teacher High School Calumet, Michigan; J. H. Mahler, Principal, Calumet Township High School, Gary, Indiana; L. H. Mahoney, Principal Community High School, Hillsdale, Illinois; E. H. Stullken, Principal, Goethe School, Chicago, Illinois; C. A. Morley, Madison, Wisconsin; H. E. Wilkins, Duluth, Minnesota; C. A. Jahr, Elkhorn Wisconsin.

Miss Rae Blackburn, Director of Physical Education for Girls, Tuscola, Illinois; A. F. Brainard, Supervisor of Practice Teaching in Physical Education, University of Illinois; H. I. Buckardt, University of Illinois; R. Crowningsfield, Instructor in Physical Education, University of Illinois; C. B. Clogston, Garfield H. S. Terre Haute, Indiana; Miss Helen Ederle, Instructor in Education, Terre Haute

With respect to the evaluation of the extra-curricular activities in terms of the health, social, leisure time, and vocational standards of the North Central Association the sub-committee has not attempted of itself to say that the extra-curricular activities, either types or specifics, respectively, serve certain major or minor values. What it has done is this: It has analyzed the types into their specifics as best it could and has outlined a plan and provided a form whereby a consensus evaluation may be obtained from a larger group of competent judges. The actual conduct of such a study has been far beyond the time, energy, and money of the sub-committee. It has, however, with the aid of certain university classes in education, obtained illustrative results of the proposed technique and incorporated these into the report.

The literature on extra-curricular activities has been increasing at an amazing rate in the last ten years. There is no lack today of statistical data, descriptive information, illustrations, organization

charts and regulations, principles and theses, and "authoritative" evaluation in this field. While the sub-committee has not attempted to present complete bibliographies, it has listed all the important general treatments, has indicated the best bibliographical sources, and has cited what it judged to be the most valuable single articles and special studies bearing on the divisions of the report. It is to be kept in mind that the problems of organizing or operating the extra-curricular activities were not a part of the sub-committee's assignment. Its bibliographical concern has been chiefly for material helpful in analyzing the types into specifics. The references given, however, do include the most important material on the whole range of extra-curricular administration.

Finally, a word should be said about the failure of the sub-committee to define the term *extra-curricular* or to distinguish between *extra-curricular* and *curricular*. It did not seem likely to serve any practical end to do either of these things in this report. The sub-committee has accepted the implications of *extra-curricular* as the term is commonly used by school people. In this usage it refers to the more or less organized school doings of pupils outside the classroom. These doings are not the same in different schools nor is the line between classroom activity and extra-curricular activity drawn in the same way from school to school or from year to year in the same school. The sub-committee defends no thesis as to what shall be or shall not be regarded as *extra-curricular*. Its report will serve either a narrow or a broad interpretation of that term, or, indeed, of any other term used to indicate or include the specific pupil activities herein listed.

Teachers College, Indiana; Miss Rowena Galbraith, East Aurora H. S., Illinois; A. K. Jackson, University of Illinois; C. F. Johnson, University of Illinois; Miss Helen B. Knight, University of Chicago High School, Instructor in Physical Education; Miss Mary A. Lemay, University of Illinois; C. J. Megel, Toluca H. S., Illinois; Chester L. McKim, Herscher, Illinois; Milton M. Olander, Associate in Physical Education, University of Illinois; W. P. Reich, Principal of Madison H. S., Illinois; Miss Carita Robertson, Instructor in Physical Education, University of Illinois; H. Shields Farmington H. S., Illinois; S. C. Staley, Associate Professor of Physical Education, University of Illinois; Mrs. Maurine Bone Staley, Former Instructor in Physical Education, Illinois State Normal; G. T. Stafford, Assistant Professor of Orthopedics and Physical Diagnosis, University of Illinois; W. J. Treece, Instructor in Physical Education, University of Illinois; Fred Wakeland, Toluca H. S., Illinois; C. J. Wagner, Associate in Physical Education and Athletic Coaching, University of Illinois; L. R. Walsh, Toluca H. S., Illinois.

The report is divided into the following sections:

Section I—*The Classification of Extra-Curricular Activities into types*

Section II—*A General Bibliography*

Section III—*The Analysis of the Respective Types into Specifics*

Section IV—*Proposal for Evaluation*

SECTION I

THE CLASSIFICATION OF EXTRA-CURRICULAR ACTIVITIES INTO TWELVE TYPES

TYPE ONE. PARTICIPATION IN THE ORGANIZATION, MANAGEMENT, AND CONTROL OF THE SCHOOL.

This type included the cooperative activities of pupils in such organizations as student associations, student councils, senates, executive committees, cabinets, boards of control, congresses, squads, patrols, classes, and other administrative groups. It includes also such individual activities as those of monitors, assistants, guards, elected leaders, voluntary workers, and special administrative appointees. This type is the most broadly inclusive of all, and consequently, the most difficult to keep separated from other types. Under some forms of extra-curricular organization, indeed, participation in school administration comprehends almost all the extra-curricular activities. Here it includes only those student activities which contribute specifically and directly to the successful operating of the school. Such activities are grouped under the following administrative headings:

1. *Student control and the development of school spirit*

2. *Student benefit, welfare, adjustment*

3. *Promotion, organization, and supervision of extra-curricular activities*

4. *Assistance to teachers in home-room, class-room, and other school situations*

5. *Motivation of scholarship*

6. *Assistance in carrying out administrative system, regulations, and routines*

7. *Care of building, grounds, equipment, supplies*

8. *Establishment of satisfactory relations with home and community*

TYPE TWO. DRIVES AND COMMUNITY ACTIVITIES

1. *Drives and campaigns*: such activities as are necessary to carry on drives and campaigns in clean-up and paint-up week, health week, anti-litter week, bird week, educational week, anti-noise week, community chest campaign, and school bond campaign

2. *General improvement activities*: junior foresters, conservation club, junior citizens club, junior association of commerce, junior booster club, community play grounds, opportunity school

TYPE THREE. RELIGIOUS AND SOCIAL WELFARE CLUBS AND ORGANIZATIONS OF RELIEF

1. *Religious clubs*: Hi-Y, girl reserves, religious education groups

2. *Social and welfare clubs*: boy scouts, girl scouts, camp fire girls, boys' brotherhood, thrift clubs, etc.

3. *Organizations of relief*: junior red cross, first aid groups, social service clubs, national safety, Near East relief, hospital auxiliaries, bands of mercy, red star league, etc.

TYPE FOUR. PURELY SOCIAL ACTIVITIES. (Parties, dances, mixers, picnics, social dancing clubs, etc.)

quette clubs, dinners, banquets, receptions.)

1. *Illustrative activities for which the home is directly responsible*

2. *Activities under school influence and for which the school is indirectly responsible*

3. *Incidental conduct activities such as meeting and talking with pupils in the corridors, in the classroom, in the lunchroom, in the auditorium, in the gymnasium*

4. *Social activities of pupils, informal but purely social in nature, such as mixers, afternoon school parties, picnics, and informal affairs in the gymnasium*

5. *Social activities of pupils in more formal gatherings of pupils, such as, dinners, receptions, and banquets*

6. *Social and etiquette club activities*

TYPE FIVE. ATHLETICS AND OTHER PHYSICAL TRAINING ACTIVITIES

A. PHYSICAL EDUCATION FOR BOYS

1. *Mass play and physical activities common to an unlimited number of participants, e. g., cage ball, etc.*

2. *Activities for the larger group games, e. g., football, basketball, etc.*

3. *Activities for the small group games, e. g., wrestling, tennis, etc.*

4. *Activities for individual participating games, e. g., golf, archery, etc.*

5. *Activities for managers, captains, etc.*

B. PHYSICAL EDUCATION FOR GIRLS

All the above divisions under Section A organized for girls

TYPE SIX. SCHOOL PUBLICATIONS. (Newspapers, magazines, annuals, and handbooks)

1. *Activities of members of a board of publications*

2. *Activities of members of a publication staff*

3. *Activities of managing editors or assistant managing editors*

4. *Activities of departmental editors or assistants*

5. *Activities of reporters*

6. *Activities of business managers, circulation managers, or assistants in either case*

7. *Activities of students not officially connected with the publication*

TYPE SEVEN. DRAMATICS AND PUBLIC SPEAKING (Plays, pageants, operettas, movies, folk songs and dances; debating, oratory, extemporaneous speaking, school forums)

1. *Activities common to dramatics and public speaking*

2. *Activities common to various forms of dramatics*

3. *Activities peculiar to specific dramatic forms or to described individual participants*

4. *Activities peculiar to debating*

5. *Activities peculiar to other kinds of public speaking respectively*

TYPE EIGHT. MUSICAL ACTIVITIES (Chorus, glee clubs, quartets, operas, operettas, cantatas, appreciation clubs, band, orchestra and other musical organizations)

1. *Instrumental*

2. *Vocal*

3. *Musical appreciation clubs*

TYPE NINE. SUBJECT CLUBS (Agriculture, commercial, English, mathematics, social science, science, trade and industrial, and other subject clubs)

1. *Vocational subject clubs*

(1) *Agriculture*

(2) *Home Economics*

- (3) Commercial
Etc.
- 2. *Academic subject clubs*
 - (1) Literature
 - (2) Writing
 - (3) History
 - (4) Mathematics
Etc.

TYPE TEN. MISCELLANEOUS CLUBS (Not included in *Type Nine*, such as, aircraft, travel, radio, camera, collection, rifle)

- 1. *Aircraft*
- 2. *Travel*
- 3. *Radio*
- 4. *Camera*
Etc.

TYPE ELEVEN. ASSEMBLIES

- 1. *Talks by principal, teachers, pupils, or outsiders*
- 2. *Dramatics by staff, pupils, outsiders, or combination*
- 3. *Demonstration*
- 4. *Musical entertainment*
- 5. *Public speaking*
- 6. *School forum*
- 7. *Recognition assemblies*
- 8. *Program or recitals of individual entertainers*
- 9. *Movies*
- 10. *Radio programs*
- 11. *Special day program*

TYPE TWELVE. HOME ROOM ACTIVITIES

SECTION II

GENERAL REFERENCES

- (1) Fretwell, E. K. "Extra-Curricular Activities of Secondary Schools"

Selected bibliography appearing in several numbers of *Teachers College Record*, and as follows:

"Bibliography of Pupil Participation in the Extra-Curricular Life of the

School." XXIV (Jan. 1923), 60-72
 "High School Assembly." XXV (January, 1924), 61-9
 "School Publications." XXVI (September, 1924), 59-73
 "Bibliographies of Home Rooms, Pupil Participation in Government, Finances Assembly, and Fraternities." XXVII (June, 1926), 901-29
 "Bibliographies on School Clubs and on Debating." XXVIII (June, 1927), 1018-34

- (2) Odell, Charles W. and Blough, John H. "An Annotated Bibliography Dealing with Extra-Curricular Activities in Elementary and High Schools." *University of Illinois: Bulletin No. 29*. University of Illinois: Bureau of Educational Research, College of Education, 1925, 40 p.
 An extensive annotated list of references dealing with extra-curricular activities as reported in educational periodicals, educational books, school surveys, and records, proceedings of educational associations, U. S. Bureau of Education, publications, and pamphlets covering the period 1920-1925. All are classified under the following headings: general, assemblies, athletics, including play and recreation, citizenship clubs and societies, finances, honor societies, publications, social life (narrow sense), and miscellaneous
- (3) Roemer, Joseph, and Allen, Charles F. *Extra-Curricular Activities in Junior and Senior High Schools*. D. C. Heath & Co., 1926.

A very full bibliography on each of the twenty chapters in the book, pp. 261-330.

- (4) Wise, J. Hooper, and Roemer, Joseph. "A Study of the Extra-Curricular Activities in the Public Schools of Florida" Extra No. 4, *University Record* (June, 1925) Gainesville, Florida, University of Florida, Teachers College, p. 198.

An annotated bibliography, arranged both in general and topical order, pp. 112-198.

- (5) Deam, Thomas M., and Bear, Olive M., *Socializing the Pupil Through Extra-Curricular Activities*. Benjamin H. Sanborn and Company, 1928

An extensive annotated bibliography is given at the end of each of the chapters

- (6) Blackburn, Lura. *Our High School Clubs*. The Macmillan Co., 1928
- (7) Cox, Philip, W. L., *Creative School Control*, J. B. Lippincott Company, 1927
- (8) Foster, Charles R., *Extra-Curricular Activities in the High School*, Johnson Publishing Co., Richmond, Virginia, 1925
- (9) Hatch, R. W., *Training in Citizenship*, Charles Scribner's Sons, 1926
- (10) Jordan, R. H., *Extra-Classroom Activities in Elementary and Secondary Schools*, Thomas Y. Crowell Co., 1928
- (11) McKown, Harry C., *Extra-Curricular Activities*, The Macmillan Co., 1927
- (12) Meyer, Harold C., *A Handbook of Extra-Curricular Activities In the High School* A. S. Barnes and Co., 1926
- (13) Roberts, A. C., and Draper, E. M., *Extra-Class and Intramural Activities in High Schools*, D. C. Heath & Co., 1928
- (14) Rohrbach, Quincy, Alvin W., *Non-Athletic Study Activities of the Secondary School*. Philadelphia; A thesis in Education, University of Pennsylvania, 1925
- (15) Terry, Paul W., *Extra-Curricular Activities in the Junior High School*, Baltimore; Warwick and York, Inc. 1926
- (16) *The North Central Association Quarterly*, March, 1927 and March, 1928
- (17) *The 25th Year Book of the National Society for the Study of Education*. Part II, *Extra-Curricular Activities*. Public School Publishing Co., 1926
- (18) Thomas-Tindal, E. V., and Meyers, J. D., *Junior High School Life*, Macmillan, 1924
- (19) Wagenhorst, L. H., *The Administration and Cost of High School Interscholastic Activities*, Thesis, Columbia University, 1926
- (20) Wilds, Elmer Harrison, *Extra-Curricular Activities*, The Century Co., 1926

Note:—The first four references in the above list contain excellent and complete bibliographies of periodicals on the various types of extra-curricular activities. In the analysis of the types into specific activities, where special and helpful materials are found, particular references are given. The scope of this report does not allow room for the listing of pages and pages of references, as a rule, more than an adequate bibliography appears in some one of the articles, under each type.

SECTION III

ANALYSIS OF RESPECTIVE TYPES INTO SPECIFICS

ACTIVITIES COMMON TO SEVERAL TYPES

To obviate repetition in the analysis, certain activities occurring frequently under different types have been listed once for all at the beginning of this section. These activities are such as classify under the following heads:

- A. *Activities of deliberation and discussion*
- B. *Activities of investigation and study*
- C. *Activities of organization*
- D. *Activities of promotion*

Illustrative specifics of these four general forms of *Common Activities* are as follows:

- A. Activities of deliberation and discussion
 - (1) Making original or amendatory suggestions and proposals
 - (2) Expressing and defending points of view
 - (3) Opposing suggestions and proposals
 - (4) Making reports, citing facts, presenting data
 - (5) Listening, judging, voting
 - (6) Engaging in parliamentary tactics
- B. Activities of investigation and study
 - (1) Interviewing pupils, members of the school staff, members of the school board, citizens, civic officials, parents, etc.
 - (2) Making questionnaire studies
 - (3) Reading up on literature of problems

(4) Examining records; tabulating and analyzing data

(5) Gathering information from other schools

(6) Making notes, organizing material, preparing reports

C. Activities of organization

(1) Drawing up charters, constitutions, guiding principles

(2) Defining relationships

(3) Allocating duties

(4) Formulating rules, regulations, qualifications, standards, codes

(5) Outlining steps in procedure

(6) Charting, diagramming, graphically representing organization schemes

D. Activities of promotion

(1) Making speeches in assembly, home room, classroom, class meeting, club or society meeting, and to out-of-school groups

(2) Persuading individuals

(3) Preparing publicity copy

(4) Planning and executing publicity stunts

(5) Preparing posters, slogans, advertising devices

(6) Selling tickets, subscriptions, etc.

Where activities of the above kinds are characteristic of a type such will be indicated and cross reference be made to *Common Activities* as above. The specific problems, questions, topics, interests, etc., forming the subject matter of these deliberative, investigational, organizing, and promoting activities in any one type may be readily inferred from the list of executive activities within the type. In *types two* and *three* examples of *Common Activities* are given. In all other types no separate lists of *Common Activities* are given.

TYPE ONE. PARTICIPATION IN THE ORGANIZATION, MANAGEMENT AND CONTROL OF THE SCHOOL

REFERENCES:

- Fretwell, op. cit., *Teachers College Record* Jan. 1923; pp. 60-72
- Blackburn, op. cit. Chapters IV, X, XXII
- Foster, op. cit. Page 41, 59-107
- Cox, op. cit. Chapter XI
- McKown, PP. 23-113; 181-220
- Meyer, op. cit. pp. 105-140
- Roemer and Allen, op. cit. Chapter VI
- Thomas-Tindal, and Meyers, op. cit. Chap. IX
- Wilds, op. cit. Chap. IX
- Hill, Howard C. "Teaching Citizenship Through Practice," *The Historical Outlook*, XVIII (Jan. 1927), pp. 19-21
- Masters, Joseph G. "Experiments in Democracy," *The School Review* XXXV (Feb. 1927), pp. 125-133
- Nietz, John A. "Duties and Traits of a Good Citizen," *Curriculum Investigations: Supplementary Monograph of Franklin Bobbitt and Others*, op. cit. Chapter VII
- Rugg, Earle, "Special Types of Activities: Student Participation in School Government," *The 25th Yearbook of the National Society for the Study of Education*, op. cit. Chapter XI
- Sass, Dorothy M. "Student Council in the High School," *The School Review*, XXXI (March 1923), pp. 661-80
- Davis, C. O. "Training for Citizenship in the North Central Association of Secondary Schools," *Fourth Yearbook: National Association of Secondary School Principals* (1920) pp. 45-64
- Lewis, William D. "Student Participation in School Organization and Government as a Training in Democracy" *Third Yearbook: National Association of Secondary-School Principals* (1919) pp. 1-9
- Pickell, F. C. "Training in Citizenship Through Practice," *The School Review*, XXVIII (Sept. 1920) pp. 518-28
- Satchill, J. K. "Student Participation in School Administration," *The School Review*, XXX (Dec. 1922) pp. 733-41
- Drewry, Reymond G. "Pupil Participation in School Control," Harcourt, Brace & Company, 1923 (See Bibl. pp. 215-217)

1. STUDENT CONTROL AND DEVELOPMENT OF SCHOOL SPIRIT.
 - Managing school traffic
 - Patrolling halls
 - Directing pupils
 - Conducting pupils or groups of pupils
 - Maintaining lines where necessary
 - Warning pupils
 - Checking disturbances
 - Reporting persistent violators of regulations
 - Supervising pupils in lunch rooms
 - Directing the seating
 - Governing the routing
 - Directing disposition of trays and dishes
 - Checking undue noise or confusion
 - Supervising pupils in study halls
 - Watching pupils
 - Warning pupils who are out of order
 - Reporting the persistently unruly
 - Supervising school assemblies
 - Ushering
 - Directing the seating
 - Making room for visitors
 - Warning, checking, reporting pupils
 - Supervising pupils similarly as above in classrooms, home rooms, libraries, laboratories, shops, and elsewhere in the building and on the playgrounds or athletic fields
 - Participating in the trial of pupils charged with misbehavior
 - Stating and supporting charges
 - Acting as judge, member of jury, or member of judicial group
 - Deciding on penalties and imposing same
 - Controlling and directing pupils in mass meetings, class meetings, general student organization meetings, demonstrations, parades, rallies
 - Acting as cheer leaders
 - Conducting pep assemblies, parades, demonstrations
 - Teaching school yells and songs
 - Adopting school emblems, insignia, colors, yells
 - Promoting school ideals, patriotism, courtesy, honesty (See common Activities. Type D)
 - Improving student behavior on way to and from school
2. STUDENT BENEFIT, WELFARE ADJUSTMENT
 - Conducting lost and found bureau
 - Conducting book exchange
 - Conducting employment bureau
 - Conducting an information bureau
 - Guarding cloak rooms and lockers
 - Guiding new students
 - Explaining to new students the course of study, school requirements, regulations, procedures and the like
 - Acting as "big brother" or "big sister" to beginning students
 - Preparing, publishing and distributing information circulars or school handbooks
 - Explaining the high school to elementary school pupils
 - Providing for student safety
 - Street crossing regulations
 - Fire drills
 - Exit placards and direction placards
 - Reporting contagious diseases
 - Automobile regulations
 - Reporting unsanitary conditions in eating places
 - Correcting or reporting unsanitary conditions in school
 - Developing first aid and emergency service
 - Welfare work among students
 - Ministering to the absent ill
 - Providing food and milk in needy cases
 - Creating and accumulating scholarship funds

Stimulating acquaintance among pupils
 Checking and caring for bicycles
 Interviewing school authorities in behalf
 of individual students, groups, or the
 whole student body

3. PROMOTION, ORGANIZATION, AND SUPERVISION OF EXTRA-CURRICULAR ACTIVITIES

Conducting "drives", "weeks", and
 special school campaigns

Clean-up week

Good English week

Safety week

Education week

Fire prevention week

Raising funds for publication, athletics,
 debates, bands, orchestras, enter-
 tainments, assembly programs

Selling candy, hot dogs, popcorn, etc.

Selling tickets

Soliciting subscriptions

Conducting general school enterprises

Carnivals

Pageants

Circuses

Exhibits

Home-comings

Arranging for assembly programs

Getting speakers

Getting educational films

Getting music

Conducting general elections

Granting charters to student organiza-
 tions

Scheduling meetings of student organiza-
 tions

Working out point systems for student
 organizations

Keeping records of extra-curricular ac-
 tivities

Conducting charitable undertakings such
 as the distribution of food at
 Thanksgiving and Christmas

Representing student groups or organ-
 izations in central bodies such as
 councils, senates

Auditing accounts of student organiza-
 tions

Keeping books for central governing
 bodies

Conducting correspondence for central
 governing bodies

Presiding at meetings of student body
 and of central organizations

Addressing and sending invitations to
 school functions. Attending to gen-
 eral projects for school exhibits such
 as charts, graphic illustration, dec-
 oration

Arranging for inter-society contests

Awarding letters

Securing chaperons

Conducting school and patrons' banquets

Decorating

Arranging tables

Arranging seating

Ushering

Introducing

Serving

Clearing up

Sponsoring school dances and parties

4. ASSISTANCE TO TEACHERS IN THEIR MANAGERIAL, TEACHING AND CLERICAL DUTIES

Helping in the library

Checking books in and out

Arranging books on shelves

Finding and delivering books

Arranging book exhibits

Seating pupils

Helping pupils

Checking pupil passes, permits, etc.

Cataloging and filing

Attending to physical condition of
 room

Helping in classrooms

Attending to physical conditions

Keeping attendance
 Distributing and collecting papers, materials, experimental equipment
 Conducting contests
 Gathering materials for illustrative purposes
 Clerical work
 Substituting for absent teacher
 Taking care of bulletin board
 Helping in home rooms
 Attending to physical conditions
 Keeping attendance
 Conducting contests
 Caring for bulletin boards
 Making announcements
 Representing causes, drives, undertakings
 Explaining school procedures
 Conducting election of representatives
 Making out home room programs
 Writing up home room notes

5. MOTIVATION OF CURRICULAR WORK:

Discussing how to study problems in home rooms or in special groups
 Checking on scholarship of home rooms, class society, or other student groups
 Making scholarship speeches
 Giving publicity to honor roll pupils
 Giving publicity to honor societies
 Conducting scholarship contests between home rooms, classes or other groups
 Securing honor study halls
 Setting scholarship qualifications for admission to student organizations or offices
 Arranging for scholarship rewards and prizes
 Helping individual pupils improve their work
 Preparing scholarship publicity
 Collecting or preparing materials for instructional purposes, educational exhibits, museums

6. ASSISTANCE IN CARRYING OUT ADMINISTRATIVE SYSTEMS, REGULATIONS, ROUTINE:

Care of general bulletin boards
 Posting
 Removing old material
 Arranging material
 Watching for improper material
 Acting as messengers
 Between office and teacher and pupils
 Between teachers and teachers and pupils
 Between visiting parents and teachers and pupils
 Keeping attendance
 Supervision of tardiness
 Collection of attendance reports
 Transcription of attendance records
 Filing excuses
 Inquiring about absentees
 Answering telephone
 Tending office counter
 Clerical work of all kinds
 Helping with registration
 Directing pupils
 Transcribing data
 Tabulating data
 * Representing teachers
 Giving information
 Distributing blanks
 Checking returns

7. CARE OF BUILDING, GROUNDS, EQUIPMENT AND SUPPLIES

Acting on waste paper squad
 Acting on grounds squad
 Removing paper and litter
 Suggesting regulations
 Making proposals for improvement
 Care of statuary, paintings, exhibit case
 Repairing school equipment
 Repairing damages or removing defacements
 Landscaping grounds

8. ESTABLISHING OF SATISFACTORY RELATIONSHIPS WITH HOME AND COMMUNITY:

Putting on school exhibits

Planning, organizing, promoting (See common activities A, B, C, and D)

Hanging, posting, mounting, arranging, decorating

Directing, guiding, assisting, and informing visitors

Defending the school from exploitation and misrepresentation

Securing the "facts of the case" and giving proper publicity to same

Disciplining or reporting students purveyors of untruthful school gossip

Creating student concern for the good name of the school through publications, school platforms, group and individual conferences, concerted drives

Co-operating with home and community

Helping parent-teacher association with projects

Contributing services to community undertakings

Putting on father and son, mother and daughter banquets

Advertising the school and its work

Through speeches before community organizations

School columns in the local press

Occasional bulletin sent to homes

Public entertainments and demonstrations

TYPE TWO. SCHOOL AND COMMUNITY ACTIVITIES

1. DRIVES AND CAMPAIGNS: such activities as are necessary to carry on drives and campaigns in clean-up and paint-up week, health week, anti-litter week, swat-the-fly week, anti-mosquito week, bird week, educational week, anti-noise week, community chest, bond campaign

2. GENERAL IMPROVEMENT ACTIVITIES: junior foresters, conservation club, junior citizens club, junior association of commerce, junior booster club, community betterment club, community playgrounds, opportunity school

REFERENCES

- Blackburn, op. cit., Chap. X, XVI, XX
 Foster, op. cit., pp. 33, 35,—40, 52-53, 55
 McKown, op. cit., pp. 221-236; 481-511
 Deam and Bear, op. cit., Chap. VI
 Roemer and Allen, op. cit., Chaps. IX, X, XIV
 Clean-Up and Paint-Up—Blue Book. National Clean-Up and Paint-Up Campaign Bureau, 243 West 39th St., N. Y.
 Bureau of Commercial Economics, Washington, D. C.
 Hatch, R. W. "Projects in Citizenship," *The Historical Outlook* XIII (Feb. 1922) pp. 50-59.
 Lambert, J. B., "A High School Civic Project," *The Historical Outlook* XIII (Oct. 1922), pp. 259-60
 Meyer, op. cit., Part VIII
 Neitz, John A., in *Curriculum Investigation* by Bobbitt, op. cit., Chap. VII
 25th Yearbook of the National Society, op. cit., Part I
 The Junior Citizen, Publication of the Lincoln, Neb., Board of Education
 Perry, C. A. "The High School as a Social Center," in *The Modern High School* by Johnston and Others, (Charles Scribners Sons, 1914) Chap. XXI
 "Experimental Curriculum-Making in the Social Studies (VI Pupil Activities' and Community Contacts)," *The Historical Outlook* XV (Jan., 1924) p. 48 ff.

An analysis of school and community activities into specifics gives a duplication of certain general forms of pupil activities occurring in all of the twelve larger types. Reference was made to this in the introductory part of Section III. The following brief listing uses the pattern there set down and affords concrete examples under this type (common activities)

A. Activities of deliberation and discussion

- (1) Planning for campaigns
- (2) Discussing community needs for playgrounds
- (3) Discussing city plans
- Etc.

These overlap the project or regular work in civics classes

B. Activities of investigation and study

- (1) Parks and playgrounds as related to play activities in the school
- (2) Community recreational centers
- (3) Street and fire hazards
- Etc.

These, too, overlap the project or regular work in civics classes

C. Activities of organization

- (1) Organizing an individual school for a drive or campaign
- (2) Organizing and electing officers for a junior foresters club, community betterment club, etc.
- Etc.

D. Activities of promotion

- (1) Urging the planting of trees
- (2) Urging wild flower protection
- (3) Speaking for clean streets and alleys
- (4) Campaigning for sewage disposal plant

Activities of *execution*, even, occur repeatedly in the different kinds of organizations within any one general type. To reduce repetition, type two of extra-curricular activities has been divided into two groups,—specific activities of drives and campaigns, and general improvement activities.

1. DRIVES AND CAMPAIGNS

Making and distributing posters

Preparing card board map of city showing spots in which conditions need to be changed

Preparing same sort of a map to show places of interest and of activity

Visiting city institutions, such as city council, legislature, post office, State Capitol

Making a tour of the city, visiting hospitals and penal institutions

Visiting banks, factories, stock exchanges, markets, and other industrial institutions

Visiting charitable institutions, slums, etc.

Working out plans and helping in carrying out "Safe and Sane" Fourth of July

Speaking before civic clubs

Carrying on campaigns against gypsy moth, gussock moth, tent caterpillar, boll weevil, corn borer, San Jose scale, grain rusts, army worm, and other insects and pests

Carrying on clean-up and paint-up campaign by inspecting front and back yards and reporting conditions: conditions of basements and attics; removal of ashes, and rubbish, etc.; provisions for gardens, flowers; counting and reporting number of trees in section of a city; inspecting and reporting conditions of chimneys; etc.

Carrying on other campaigns such as against bill boards, safety first, better care of school property, against cruelty to animals

Campaign against fires; fire drill, inspection of school, the building of fires, how to ring an alarm, playing with matches, leaving things on fire escapes

Campaign against unnecessary noise in a street

2. GENERAL IMPROVEMENT ACTIVITIES

- Building bird houses and bird baths
- Making of an outdoor running track, tennis court or hand ball court
- Doing landscape gardening for the school
- Building cement walks
- Petitioning for closing street for recreational purposes
- Building of a skating rink
- Acting as junior police
- Exhibiting products from
 - (a) school gardens
 - (b) sewing circles
 - (c) shop articles
 - (d) canning clubs, etc.
- Cleaning up of some spot of civic or historical interest, and the erecting of an appropriate tablet or marker
- Forming a school bank
- Preparing card board map of city showing places of interest and activity
- Preparing card board map of city showing place where conditions need to be changed
- Making a guide book for the community
- Making a social survey of the community
- Carrying on a library drive for books
- Beautifying and adorning school building
- Planning for a tour of the city
- Visiting city institutions
- Carrying on publicity for a new high school
- Organizing, editing, and publishing a newspaper
- Studying industrial life of the city

TYPE THREE. RELIGIOUS, SOCIAL WELFARE CLUBS, AND ORGANIZATIONS OF RELIEF

1. RELIGIOUS CLUBS: Hi-Y, girl reserves, religious education groups

2. SOCIAL AND WELFARE CLUBS: boy scouts, girl scouts, camp fire girls, boys' brotherhoods, thrift clubs, etc.

3. ORGANIZATIONS OF RELIEF: junior red cross, first aid groups, social service clubs, national safety, near east relief, hospital auxiliaries, band of mercy, red star league, etc.

REFERENCES

- Blackburn, op. cit., Chaps. X, XVI, XX
- Deam and Bear, op. cit., Chap. VII
- McKown, op. cit., pp. 221-236; 461-511
- Meyer, op. cit., Part VIII

PUBLICATIONS

- Boy Scouts*, 200 Fifth Avenue, New York City
- Girl Scouts*, 620 Lexington Ave., New York City
- Junior Red Cross*, Headquarters at Washington
- Safety Education*, 120 East 42nd St., New York City
- Camp Fire Girls*, 31 East 17th Street, New York City
- Near East Relief*, 151 Fifth Avenue, New York City
- Girl Reserve Department*, National Board of the Y. W. C. A. New York City
- Hi-Y*, National Headquarters, 347 Madison Avenue, New York City
- Atkinson, H. G., "The Hi-Y in Mississippi," *The School Review* XXX (Nov., 1922) 702-706
- Barclay, L. W., "Education Work of the Boy Scouts," *U. S. Bureau of Education: Bulletin*, 1921, No. 46
- Bryant, S., "Educational Work of the Girl Scouts," *U. S. Bureau of Education: Bulletin*, 1921, No. 46.
- Lewis, G. T., "An 'Every Girl' Supper" *The School Review* XXXII (Feb., 1924) 134-41
- Bowman, M. E., "The School Savings Bank," *School and Society* XVI (Sept. 16, 1922) 309-315
- Oberholtzer, Mrs. S. L., "School Savings Banks," *U. S. Bureau of Education Bulletin*, 1914, No. 46
- Payne, R. F., "Scouting in the Horace Mann School for Boys," *Teachers College Record* XXIII (March, 1922) 146-159
- Russell, J. E., "Scouting Education," *Teachers College Record* XVIII (Jan., 1917), 1-13
- Pound, Olivia, "The Social Life of High School Girls: Its Problems and Its Opportunities," *The School Review* XXVIII (Jan., 1920) 50-56

Activities common to all of these clubs

A. Activities of deliberation and discussion.

- (1) Causes and preventions of automobile accidents
- (2) Traffic laws, violations, penalties, enforcement
- (3) Discussing health conditions
- (4) Camp site
- (5) Preparing budgets

B. Activities of investigation and study

- (1) Causes of fires
- (2) Safe milk
- (3) Health responsibility
- (4) Interviewing professional men and women
- (5) Planning welfare buildings
- (6) Parks, sewage disposal plants, etc.

C. Activities of organization

- (1) Organizing drives
 - (2) Organizing safety regulations for the school
 - (3) Organizing school banks
 - (4) Organizing a summer camp
- Etc.

D. Activities of promotion

- (1) Community chest
- (2) Welfare institutions for girls; for boys
- (3) Vacation Bible School
- (4) Schools of religious education

Many of the specific activities of execution are the same or similar in many of these organizations. Three groups of specific activities more or less different may be pointed out; religious activities, social and welfare activities, relief activities.

1. RELIGIOUS ACTIVITIES

Leading various study groups
Teaching Bible class

Teaching and assisting vocational Bible School

Reading and studying Bible

Engaging in Bible study

Carrying on 4-C campaign (clean speech, clean sportsmanship, clean scholarship, and clean living)

Attending summer camps

Investigating and visiting charitable organizations

Planning and carrying on Christmas programs

Discussing life work problems

Planning father and son banquet

Planning mother and daughter banquet

Staging moral and religious plays

Studying careers of successful men

Attending conferences

Attending weekly meetings for discussion

Serenading shut-ins

Carrying flowers and gifts to shut-ins or sick

2. SOCIAL AND WELFARE CLUBS (Illustrative)

(1) Boy scouts

Acting as scout masters

Learning scout law and scout craft

Acting as safety patrols

Raising the flag

Taking scout oath

Doing good turn

Etc.

(2) Girl scouts

Developing household skills

Working with arts and crafts

Cultivating habits of hospitality

Learning scout law and scout craft

Gardening

Etc.

(3) Camp fire girls

Learning camp craft

Studying birds

Beautifying yards
 Learning names of states
 Identifying and describing flowers
 Destroying moth
 Weaving rugs
 Refinishing furniture
 Planning and giving house warmings, etc.
 Etc.

(4) National Safety

Making and putting up posters
 Inspecting school buildings and groups
 Reporting broken glass, rusty nails, etc.
 Watching out for hazards, unguarded crossings and excavations, sidewalks out of repair
 Guarding street crossings

Illustrative activities characteristic of more than one of these organizations

Coaching younger boys or girls
 Conducting outings or hikes
 Tutoring backward pupils
 Leading various study groups
 Teaching English to foreigners
 Conducting observation trips
 Attending summer camps
 Promoting community Christmas tree
 Preparation of baskets for Thanksgiving dinners
 Learning first aid practices
 Swimming (free and under all kinds of handicaps)
 Setting tents
 Encouraging health habits
 Making camp kits
 Building camp fires
 Keeping health charts
 Reading biographies of Roosevelt, Florence Nightingale, Grenfell, Pasteur, and other health promoters
 Participating in games, picnics, dinners, and parties

Hiking
 Participating in Memorial Day parade
 Participating in Armistice Day parade
 Participating in Parent-Teachers' meeting
 Starting and maintaining savings account
 Promoting garden making
 Conducting observation trips
 Collecting insects, butterflies, etc.
 Studying nature

3. RELIEF ORGANIZATIONS

Assisting in drives
 Helping on tag days
 Selling Red Cross seals
 Collecting clothes for Armenians
 Collecting and making over clothes
 Making scrap books and articles for entertainment of children in hospitals
 Making and sending candy to charity organizations
 Raising money for milk fund
 Entertaining children from local charity
 Helping to provide outings for dependents
 Visiting the sick
 Assisting the aged
 Providing recreation for needy children
 Caring for children
 Instituting health campaigns
 Surveying local charity organizations

TYPE FOUR. PURELY SOCIAL ACTIVITIES (Dances, mixers, picnics, social dancing clubs, etiquette clubs, dinners, banquets, receptions, and other purely social activities not included in the analysis of *Type Two* and *Type Three* of extra-curricular activities)

1. SOME EXAMPLES OF SOCIAL ACTIVITIES OF PUPILS FOR WHICH THE HOME IS DIRECTLY RESPONSIBLE. Illustrations of such activities are:
 Attending movies
 Driving and riding in automobiles

Sight-seeing
 Playing games
 Just having fun
 Writing letters
 Attending out of school parties
 Talking over telephone
 Walking with friends to and from school
 Making dates
 Going on vacation trips
 Going on excursions
 Etc.

This list may be greatly supplemented, but these activities are really not extra-curricular activities at all. They are out-of-school activities for which the school is not responsible. They may be activities over which the ideals of the school should act as controls. For further examples of out-of-school social activities, not included in the above list or in the analysis of specific pupil activities made in type two of extra-curricular activities, see the following references:

Addams, Jane. *The Spirit of Youth and the City Streets*, The Macmillan Co.

Addams, Jane. *Twenty Years at Hull House*, the Macmillan Co.

Starrett, Helen Ekin. *The Charm of Fine Manners*, The Lippincott Co.

Lehman, Harvey C. "Play Activities of Persons of Different Ages" *Curriculum Investigations by Franklin Bobbitt and Others* op. cit., p. 150

2. SOCIAL ACTIVITIES UNDER SCHOOL INFLUENCES AND FOR WHICH THE SCHOOL IS INDIRECTLY RESPONSIBLE

Illustrative pupil activities:

Attending games and contests at home and out-of-town
 Securing and providing transportation
 Securing tickets
 Eating away from home

This form of activity overlaps the analysis made in *Type Five* of extra-curricular activities:—*Participation in Ath-*

letic and other Physical Training Activities.

REFERENCES:

Deam, Thomas M., and Bear, Olive M., op. cit., Ch. IV

Staley, Seward C. "The Program of Sports-manship Education," *University of Illinois Bulletin*, XXI (1924)

For further references see Type Five

3. EXERCISING GOOD MANNERS IN THE CORRIDORS, IN THE CLASS ROOM, IN THE LUNCHROOM, IN THE AUDITORIUM, AND IN THE GYMNASIUM

Illustrative pupil activities:

Greeting pupils and engaging in conversation

Showing appreciation

Being courteous

Addressing teachers or class

Passing orderly in corridors

Avoiding loitering, visiting, pushing, and playing

Answering all questions

Speaking in pleasant tone

Avoiding unnecessary noise

Showing regard for rights and conveniences of class-mates, etc.

Etc.

REFERENCES:

Roemer, and Allen, op. cit., Ch. VIII

Deam and Bear, op. cit., Ch. IX

Pringle, Ralph W., *Adolescence and High School Problems* D. C. Heath & Co. (1922) Chs. VI and XI

Johnson, Franklin W., "The Social Organization of the High School," *The School Review* XVII (Dec. 1909) pp. 66-80

Manners and Conduct in School and Out by The Deans of Girls in Chicago High Schools. Allyn and Bacon

Manners in the Home, School and Public Decatur High School, Decatur, Illinois

4. SOCIAL ACTIVITIES OF PUPILS, INFORMAL, but purely social in their nature, such as mixers, afternoon school parties, picnics, and informal affairs in general

Occasions for social gatherings and events of this kind are April Fool's day, Christmas, class parties, club parties, corn roasts, country fairs, get acquainted parties for freshmen, Hallowe'en parties, hikes, picnics, school carnivals, school circus, senior breakfasts, sleigh or sled rides, and wiener roasts.

REFERENCES FOR SOCIAL GAMES

Social Games and Group Dances, Elsom and Trilling

Baker's Book of Games for Boys, Associated Press, N. Y. C.

Wollcott's Book of Games

Bancroft's Book of Games, Macmillan Co.

Cheiro's Palmistry, Rand McNally

Stunts and Special Parties, Era Betzner, 20c
Woman's Press, 600 Lexington Ave., N. Y. C.

Pupil Activities

Engaging in conversation

Requesting a dance

Participation in plays and musical games

Guessing charades

Acting out charades and stunts

Introducing strangers

Participation in carnival programs

Serving on stunt committees

Serving on program committees

Serving on transportation committees

Serving on finance committees

Serving on eats committees

Preparing refreshments and eats

Participating in singing, boating, swimming, skating, coasting, and hiking

Toasting wieners

Toasting marshmallows

Cooking food

Providing for chaperons

Doing magic stunts

Engaging in athletic contests such as:
potato race, three-legged race
Etc.

5. SOCIAL ACTIVITIES OF PUPILS AT MORE FORMAL SOCIAL FUNCTIONS SUCH AS DINNERS, RECEPTIONS, AND BANQUETS

Some special occasions for social functions of the more or less formal type are Columbus day, Frances E. Willard day, Washington's birthday, Lincoln's birthday, St. Patrick's day, Junior and Senior receptions, old-fashioned parties, Armistice day, Arbor day, Memorial day, Christmas, and New Year's parties

See especially Roemer and Allen, pp. 115-118

Pupil Activities

Standing in receiving line

Acting as host or hostess

Meeting people

Preparing programs

Preparing invitations

Preparing favors

Preparing menu cards

Engaging orchestra

Decorating place of party

Considering interests of others

Introducing people

Carrying on conversation

Welcoming guests

Expressing appreciation to hosts

Dancing

Accepting a dance

Refusing a dance

Participating in grand march

Eating and drinking

Making a toast

Giving a reading

Rendering vocal music

Accompanying partner to dinner

Promoting wholesome atmosphere

Maintaining neatness of appearance

Dressing becomingly

Employing forms agreeable to others

Using proper designations when referring to others

Showing courtesy to chaperons and visitors

6. PUPIL ACTIVITIES OF SOCIAL AND ETIQUETTE CLUBS

Studying forms of social conduct

Learning American Creed

Providing programs for special days such as Columbus day, Armistice day, Hallowe'en, Thanksgiving, Frances E. Willard day, Arbor day, Christmas, Washington's birthday, Memorial day.

Working out rules of conduct for school

Making social program or calendar for the year

Studying decorations, refreshments, kinds of music, costs, and styles of invitations

Teaching good form in dancing

Teaching party courtesies

Studying games and plays

Studying room manners

Codifying conduct manners for the home, school, and street

Welcoming new pupils

Encouraging good sportsmanship

Etc.

ADDITIONAL REFERENCES:

Elliot, Chas. W. "Democracy and Manners," *Century Magazine* Volume 83, pp. 173-8

Everyday Manners for American Boys and Girls by the Faculty of South Philadelphia High School for girls. Macmillan Co. (1922)

Clark, Thomas A., "Morals and Manners," in the *High School Boy* Macmillan Co. 1920. 132-151

Clark, Thomas A., "The Passing of the Chaperon," *Atlantic Monthly* Vol. 129 pp. 516-9

Hall, G. Stanley, "Flapper Americana Novissima," *Atlantic Monthly* Vol. 129 pp. 771-780

Palmer, George Herbert, *Ethical and Moral Instruction in Schools*, Houghton Mifflin Co. (1908)

Charters, W. W., *The Teaching of Ideals*, The Macmillan Co.

Deam and Bear, op. cit. pp. 237 ff

Roemer nad Allen, op. cit. p. 120 ff

TYPE FIVE — ATHLETICS AND OTHER PHYSICAL TRAINING ACTIVITIES

A. PHYSICAL EDUCATION FOR BOYS

This report has been organized into the following divisions. Obviously some of these divisions overlap.

1. Mass play and physical activities common to an unlimited number of participants, e. g., cage ball, etc.

2. Activities for the larger group games, e. g., football, baseball, etc.

3. Activities for the small group games, e. g., wrestling, tennis, etc.

4. Activities for individual participating games, e. g., golf, archery, etc.

5. Activities for managers, captains, etc.

B. PHYSICAL EDUCATION FOR GIRLS

All the above divisions under section A organized for girls

The above divisions in A and B are presented under the following headings:

(1) Listing of activities under the general heading

(2) Analysis of at least one game, sport or activity into sub-activities

(3) Listing of a limited number of references that will give information concerning the activities listed

A. PHYSICAL EDUCATION FOR BOYS

1. MASS PLAY AND PHYSICAL ACTIVITIES

(1) *Listing activities*: The following is a representative list of the various activities adaptable to mass play. (*Note*—These are not intended to be listed in order of importance, but are arranged alphabetically.)

Games: baseball, basketball, cage ball, circle dodge ball, cross country, German bat ball, (Long ball), hit pin baseball, hockey, indoor baseball, playground ball, prisoner's base, pull-a-way, punch ball,

soccer, speed ball, three deep, touch-foot-ball, track and field, tug-of-war, volley ball, water polo

Drills: apparatus work, calisthenics, circus, corrective class work, field day drills, gymnastic dancing, marching, pageants, pyramids, tumbling, wand drills

(2.) *Analysis of German bat ball into representative sub-activities*

Batting: Holding bat, stance at plate, swinging at ball, following thru, starting after hit is made, restraining from running on poor hit, releasing bat after hit is made, eyeing the ball

Running the bases: Judging ability to reach base safely, dodging thrown ball, judging value of hit, touching bases, staying on far base

Field: Fielding ground ball, catching fly ball, throwing ball in from field, throwing ball to hit player, position of hands to catch ball, catching "englished" ball

(3.) *Representative references*

A partial bibliography was published by an earlier sub-committee on physical education, in the N. C. A. Quarterly for March 1927, pages 556-559, reprint pages 128-131. These references were there arranged under the following eight headings: General Physical Education, Health Education, Play, Athletics, Games, Dancing, Corrective and Individual Gymnastics, Gymnastics. So far as possible it is the intention here not to duplicate in any detail the above references.

Spalding Red Cover Series, Amer. Sports Pub. Co., 45 Rose St., New York City, New York. (Each sport has a booklet which has rules, etc.)

Manley, E. J. *Fundamentals of Swimming and Aquatic Sports*, The Service Press, Champaign, Illinois 1927. \$3.00

Stafford, G. T. and Tappan, E. A. *Practical Corrective Exercises*, Bailey and Himes, Champaign, Illinois 1927. 164 pages \$2.00

Missouri State Course of Study in Physical Education, Jefferson City, Missouri, Supt. of Public Instruction

Physical Education Course of Study, Detroit Public School System, Supt. of Public Instruction, Detroit, Michigan

2. ACTIVITIES FOR THE LARGER GROUP GAMES

(1) *Illustrative lists:* baseball, basketball, football, hockey, miscellaneous games, playground ball, soccer, track, volley ball

(2) *Analysis of basketball into representative sub-activities*

Catching the ball

Passing: underhand, overhand, 'over-head, special pass, long, short, bounce, push

Shooting: underhand, overhand, crotch, foul, hook, one-hand push, rebound, dribble, blocking, feints, stops, and pivots

Tactics of:—*forwards:* offensive, defensive; *guards:* offensive, defensive; *center:* general play, offensive, defensive, jumps

Team defense: when opponents are after play, when opponents get tip-off, out of bounds, foul line

Team offense: center plays, out of bounds plays, foul line plays

General style of team play

Miscellaneous: diet, sleep, baths and rubs, rules

(3) *Representative references*

Basketball

J. C. Ruby, *How to Coach and Play Basketball*, Bailey & Himes, Champaign, Ill. 1926. 268 pages \$3.75

Meanwell, W. E., *Science of Basketball*, H. Johnson, Madison, Wisconsin

Allen, F. C., *My Basketball Bible*—Smith & Griers, Kansas City, Mo.

Baseball

Lundgren, C. L., *Baseball Notes*—Student Supply Store, Champaign, Illinois

Berry, E., *Baseball Notes*—Barnes & Co., New York

Football

Zuppke, R. C. *Technique and Tactics*—Bailey & Himes, Champaign, Illinois 1924. 250 pages \$5.00

Backman, C. W., *A Manual of Football for High Schools*—Dept. of Industrial Journalism and Printing, Kansas State College, Manhattan, Kansas 1927. 168 pages \$3.00

Warner, Glenn S., *Football*—Stanford Univ. Press, Leland Stanford Univ., Los Angeles, California, 1927. 205 pages, \$5.00

Hockey

Hockey Guide—Spalding—Am. Sports Pub. Co. New York

Field Hockey (Girls) Guide

Playground Ball Guide

Soccer Guide

Volley Ball Guide

Giant Volley Ball—S. H. Cobb—Am. P. E. Review 31: 844-5 My. 26

Track

Gill, H., *Track and Field Athletics*—Student Supply Store, Champaign, Illinois

Jones, T. E., *Track and Field Athletics*—Chas. Scribners' Sons, New York, N. Y. 1927. 214 p. \$2.00

3. ACTIVITIES FOR THE SMALLER GROUP GAMES

(1) *Illustrative lists*: archery, billiards, boccie ball, boxing, bowling, clock golf, croquet, curling, fencing, golf, hand ball, hand polo, hand tennis, horse shoes, Jiu Jitsu, lawn tennis, leap frog, pin ball, pocket billiards, roque, tether ball, wrestling

(2) *Analysis of tennis into representative sub-activities*

Serving: proper position, precision in hold on racket, cutting the ball, selecting the stroke, speed of ball, placing serve, position after serve

Returning serve: judging bounce, force of meeting ball, shifting position, judging speed of ball, selecting stroke, placing return

Returning ball other than return of serve: judging speed of ball, judging bounce, shifting position, judging fly ball, selecting stroke, crossing opponent, force of meeting the ball

Team play: aiding partner, proper coverage of territory, playing the net, playing back-court, judging partner's ability.

Playing net: Proper position, force of meeting the ball, selecting the stroke, judging speed of ball, placing the ball.

Playing the backcourt: selecting the stroke, shifting position, judging speed of ball, judging bounce, judging fly ball, placing ball, crossing opponent.

Learning stroke: straight, overhand, underhand, backhand, cut stroke, side stroke

Adjusting to playing conditions: dry court, playing on wet court, ground rules, playing with new ball, playing with used ball, using live racket, using second-hand racket, playing on grass court

(3) Representative references

Spalding's Tennis Annual—A. G. Spalding & Bros., Chicago

Tennis for the Junior Player, The Club Player, and the Expert. W. T. Tilden 2nd. A. G. Spalding & Brothers

Tennis Errors and Remedies. A. G. Spalding and Brothers

How to Play Tennis, Richard K. Fox Publishing Company, New York

Spalding Golf Guide. A. G. Spalding & Brothers

How to Play Golf. A. G. Spalding & Brothers

Golf for Girls, Cedil Leitch. A. G. Spalding & Brothers

Lawn Games. A. G. Spalding & Brothers

Quoits, Lawn Bowls, Horseshoe Pitching and Boccie, A. G. Spalding & Brothers

Bag Punching, Harry Seebach. Richard Fox Company, New York

Boxing and How to Train, Richard Fox Co., New York

Jiu Jitsu Tricks, K. Saito, Richard Fox Company, New York

Handball Rules, Richard Fox Co., New York
Amateur Wrestling, E. C. Gallagher, Lowe & Campbell, Chicago, Illinois

Boxing, Griffith. Lowe & Campbell, Chicago
Wrestling, Clark. Lowe & Campbell, Chicago
Sports and Games, Walter Camp. Lowe & Campbell, Chicago, Illinois

4. ACTIVITIES FOR INDIVIDUAL PARTICIPATION IN GAMES

(1) *Illustrative Lists*: archery, calisthenics, camping and canoeing, clock golf, corrective exercises, dancing (clog), goal shooting, handball, horseback riding, horseshoes, individual athletics, juggling, punching the bag, skating, skiing, swimming and diving, track and field athletics, tumbling and apparatus stunts

(2) *Analysis of the punching bag exercises into representative sub-activities*

Proper positions: feet, hands, head

Height of bag: forming a fist, following thru, straight left lead

Changing course of bag: backhand punches, use of elbows, use of head

Boxing the bag

(3) *Representative references*

No. 78 R *Spaldings Athletic Library*

No. 43 R *Spaldings Athletic Library*

No. 8 R *Spaldings Athletic Library*

No. 105 X *Spaldings Athletic Library*

No. 43 R. *Spaldings Athletic Library*

No. 114 R. *Spaldings Athletic Library*

No. 86 R. *Spaldings Athletic Library*

5. ACTIVITIES FOR MANAGERS, CAPTAINS, ETC.

(1) *Illustrative lists*: athletic association committees, cheer leader, medical supervision, student assistant coaches, student officials, training

(2) *Analysis of student management into representative sub-activities*

Activities of manager: Duties during practice and games

Keep equipment ready for each practice (balls, extra equipment, whistles, watches, gob coats); keep water ready

for team; keep unwelcome spectators away from practice; see that playing field is ready for use; collect all equipment after practice; care for equipment; keep cotton, tape, etc., for minor injuries; collect data on players in practice and game

Activities of manager—duties outside the practice period; check eligibility of players; correspond with visiting team managers as to train schedule, lodging, etc.; making reservations (hotel, train, or bus); file records of individuals and of team

B. PHYSICAL EDUCATION FOR GIRLS

Because of the difference of activities involved in many of the games, it appears to be justifiable to list the activities in physical education for girls separate from those for boys.

1. MASS PLAY AND PHYSICAL ACTIVITIES

Numerous unorganized games, track and field events; some formal drills; classes in corrective work; natural dancing, pageants, etc.

2. ACTIVITIES AND SUB-ACTIVITIES FOR THE LARGER GROUP GAMES

(1) *Illustrative lists*:

Volley ball: batting, serving, stretching, team play, alertness, watchfulness, running, jumping, accuracy in placing ball

Soccer: running, dribbling, kicking, checking ball, team work, tackling an opponent, passing the ball, the volley, shooting and placing shots, intercepting the ball, various plays and formations

Basketball: training, shooting for goal, dribbling the ball, juggling the ball, bounding the ball, passing the ball, pivoting, correct guarding, dodging, various throws, blocking an opponent, "boxing up", shooting from various positions, knowledge of rules, catching the ball,

blackboard drills, quizzes, team play, signals

Indoor baseball: throwing, catching, batting, running, team work, bunting, fielding the ball, running bases, the batting order, pitching the ball, signals, learning when to run bases

Hockey (Field): knowledge of rules, of game, scoring, individual technique, the drive, the push pass, the scoop stroke, the left hand lunge, the reverse stroke, dribbling a ball, receiving a ball, fielding the ball, team play and diagrams, the "bully-off", the right hand "job", formations—free hit, penalty corner, etc., tackling an opponent, marking, intercepting, blackboard drills and formations

Crowd ball: running, jumping, rushing, team work, knowledge of rules

Hand ball: batting, serving, co-ordinations, team play, running

Bat balls knowledge of rules, running, dodging, jumping, batting, throwing, passing the ball

(2) *Analysis of basketball into representative sub-activities*

Plays and passes

Pivot: hold ball, step once or more on same foot, pivot on other foot

Bounce: bounce once, get ball again and pass

Throwing pass: quickly, with speed, accuracy

Basket shooting

One arm shot

Chest shot: ball held in front of chest, elbows flexed, quick throw

Underhand throw: low shot, arms extended, ball held in both hands

Guarding

Horizontal guarding: arms horizontal, body balanced

Vertical: body straight, hands extended up

Overhead: must not touch player, hands extended

Boxing: 2 players should not guard one

Overguarding: Keep arms from around player

Fouling: technical, personal—holding, blocking, tripping, etc.

3. ACTIVITIES FOR THE SMALLER GROUP GAMES

(1) *Illustrative lists*:

Tennis: strokes (lobby, chop, lawford, backhand, forehand, kill, net play), back court play, serving, keeping eye on ball, placement, footwork, gripping racket, cross-court play, defense, court play, co-ordination, alertness, accuracy, running, jumping, stops

Track and field events: basket ball goal shoot, basket ball throw for distance, jump and rest, pull up, running and catching volley ball, volley ball serving, putting in golf, baseball throw for distance, baseball throw for accuracy, hockey goal shoot, javelin throw, discus throw, standing broad jump, 50-yard dash, 100-yard dash, relay (pass ball, potato race, square relay, all up Indian club relay, hurdle relay, shuttle relay, hoop race, (walking relays), dodge ball throw, bicycling, rope skipping, 50-yard sack race, running broad jump, standing broad jump, quoit throw, steeple chase race, tugs of war, hurdling, high jumps, baton passing

Horse shoes: swinging arm, handling shoe, turning shoe, timing throw, judging distance, following thru, determining height of pitch, stepping

General water sports: swimming, diving, wading, canoeing, rowing, sailing, skating (ice), competitive stunts, novelty races, life saving

Swimming: strokes; (breast, back, side, crawl, back crawl, trudgeon, double overarm, single overarm) ducking, treading, being instructed, using water wings, use of slides, plunging, entering water, riding floating devices

Preliminary drill for all strokes

Diving: Knee, standing, seal, swan, jack knife, back spring, running, front, back, head stand, hand stand

Stunts: Float on back, frog dive, seal dive, log rolling, egg rolling, rocking chair, tug of war, dive for apples, breaking holds, canoe tilting, barrel tilting, target jousting, retrieving objects from bottom

Games: Water polo, water basketball, touch tag, cross tag, hunt the ring, water pullaway, water push ball, water volley ball, flashlight tag, bell tag

(2) *Analysis of swimming into representative sub-activities*

Preliminaries: correct breathing, entering water, playing in shallow water, ducking, using water wings, lying in sand

Strokes: floating, back stroke, elementary back stroke, crawl stroke, side stroke, breast stroke, trudgeon, treading water.

Plunging

Diving: knee, standing, seal, swan, jack knife, back spring, running front, back, head and hand stands

Stunts (general)

a. Competitive: tug of war, apple diving, breaking holds, barrel tilting, target jousting, log rolling, pillow fight, spring-board jumps

b. Novelty stunts: mounting barrel, water leap frog, balancing pole, watermelon grab, sloping greased pole

Games in Water: bell tag, black and white, water basket ball, water volley ball, water long ball, water push ball, water polo

Novelty races: nightgown race, derby hat race, lighted candle race, barrel race, thread the needle race, bobbing race, obstacle race.

Life saving

Holds: front, strangle, back strangle, wrist

Carries: head, cross chest, tired swimmer

Disrobing while swimming

Schaefer method of resuscitation

4. ACTIVITIES FOR INDIVIDUAL PARTICIPATING GAMES

(1) *Illustrative lists*:

Golf: selecting clubs, watching the ball, following thru, judging distance, driving, putting, teeing, stance, slicing, hooking, grip of club, foot action, body turn, concentration, form, topping, use of iron clubs, use of wood clubs

Indian clubs: formation in lines, getting clubs, correct starting position, outer arm swing, double arm swing, posture, different arm positions, arm movements combined with leg movement, arm movement combined with trunk movement, grasping of club, swinging, stretching, bending, pulling, gracefulness of movement

Gymnastics

Formal: marching tactics, walking, running, drills free, standing—exercises with or on apparatus

Light apparatus: Indian clubs, wands, dumb bells, barbells

Heavy apparatus: buck, horse—long and side, vaulting box, ladders, sea saw ladders, rings, flying and travelling, boom, window ladders, stall bars, ropes, oblique and vertical, balance beams

Informal: running, walking, skipping, etc., stunts, tumbling, pyramid building

Dancing: This is not strictly a game but should be included as a physical training activity) natural dancing, aesthetic dancing, folk dancing, gymnastic dancing, clogging, juggling, soft shoe dancing, pantomime, social

Semaphoring:

(1) Morse code
Drilling:

5. ACTIVITIES FOR MANAGERS, CAPTAINS, ETC.

(1) *Illustrative lists*: Weighing, measuring, securing suits for team, keeping track of equipment, taking care of equipment, securing new persons to join squad, helping put plays across, first aid, demonstrating, conversing with team mates, stimulating sportsmanship, courtesy, courage, etc., interest in other teams, keeping up on sport news, keeping score, dealing with opposing teams, supporting team, acting as ushers, acting as officials, visiting other schools

(2) *Representative references*:

Tumbling, Pyramid Building and Stunts for Girls and Women, Bonnie & Donnie Cotteral, A. S. Barnes & Co. 1926

Reference No. 8 under General Phys. Ed. p. 556—N. C. A. Quarterly, March 1927

Reference No. 19, p. 557—N. C. A. Quarterly under Athletics, March, 1927

Spalding's Official Rule Book: Hockey, Basket Ball, Field and Track

Reference No. 8 under Athletics, p. 557, N. C. A. Quarterly March 1927

Reference No. 9 Athletics, p. 557, N. C. A. Quarterly, March 1927

The Fun Book—Edna Geister—1923. George Doran Co.

Swimming and Diving—Gerals C. Barnes, Scribners, 1924

Note: *General Bibliography Assembled by a Previous Sub-Committee on Physical Education*

See *The North Central Association Quarterly* March 1927, pp. 556-559

TYPE SIX. SCHOOL PUBLICATIONS

REFERENCES:

Fretwell, op. cit., *Teachers College Record*, Sept. 1924 pp. 159-73

Blackburn, op. cit., XVII

McKown, op. cit. 114-137; 294-432

Roemer and Allen, op. cit., Chapter XII

Huff, B. M. "Journalism a Socializing Agency" *English Journal* XII (Feb. 1923), pp. 136-37

Reavis, W. C., "Student Publications in the High School" *The School Review* (Sept., 1922), 514-220

Reavis, W. C. "Special Types of Student Activities: Student Participation" *The Twenty-Fifth Yearbook of the National Society for the Study of Education*. Part II (1926), 141-48

Sherwood, N. H. "The Value of High School Publications" *Educational Review*, LXII (Jan. 1924) 20-21

1. ACTIVITIES OF MEMBERS OF A BOARD OF PUBLICATIONS

Discussing and helping decide such questions as—

The qualifications of publication staff members

The method of selecting publication staff members

The general nature of each publication
Regulations as to subscription and advertising prices

Regulations as to the soliciting of subscriptions, advertising, or contributions of money

Regulations as to privileges of staff members

Regulations as to financial records and accounting

Making special studies and investigations to secure data on the questions noted above

Making reports of investigations, interviews, conferences, and studies relating to the questions noted in above

Engaging in parliamentary tactics

2. ACTIVITIES OF MEMBERS OF A PUBLICATION STAFF

Attending and taking part in staff, department, or committee meetings called to consider such questions as those listed under 1 above and such other matters as—

Staff or department organization

Defining of duties and relationships of staff members

Form, style, size and general standards of the publication

Special undertakings such as contests, drives, expansion, or the introducing of new features

Making special studies and investigations in connection with matters noted immediately above

Making reports on assigned publication problems

Making proposals, offering plans, suggesting changes for improvement of the publication

Promoting subscription through speeches, preparation of publicity stunts or posters, personal solicitations, etc.

Assisting in mailing and otherwise delivering the publication

Mimeographing or printing activities

3. ACTIVITIES OF MANAGING EDITORS OR ASSISTANT MANAGING EDITORS

Looking up qualifications of candidates for staff appointments

Conferring with advisor about appointments

Making appointments

Conducting staff meetings held for such purposes as the following:

To organize the staff, name departments, decide upon respective duties

To consider and interpret orders or rulings of the board of publications

To discuss and decide for own publication such questions as those suggested under I-1 above

To take up special problems as they arise

Making own decisions and rulings

Setting up editorial office with suitable equipment of tables, typewriters, mimeograph, cupboards, filing cases

Establishing office systems

Investigating and studying problems of own office and work in literature of journalism, and in other schools

Attending press gatherings

Holding conferences with individual staff members or with departments

Making assignments to members of staff

Following up on assignments

Consulting with business manager

Personally seeing to the prompt submittal of copy

Reading, judging, and selecting from copy submitted

Reassignment, correction, revision, re-writing of copy

Final preparation of manuscripts for printer

Proofreading, galley and page

Consulting with printers, engravers, illustrators, photographers, and others interested commercially or technically in the production of the publication

Final arrangement of material in dummy

Study of style books, handbooks of English usage, current practice to decide questions of form, structure, mechanics, etc.

Searching for or inventing novelties, features, stunts, etc.

Writing editorials, dictatorial statements, editorial notes or comments, explanations, corrections, retractions, tables of contents

Preparing and blocking off headlines

Drawing up, examining, signing contracts

Making assembly, class, or home-room talks in support of publication
 Representing needs of publication before school board, civic organizations, parent-teacher associations

4. ACTIVITIES OF DEPARTMENT EDITORS OR ASSISTANTS

Selecting and appointing subordinates
 Conferring with other members of staff
 Planning the work of the department
 Submitting plans for staff consideration
 Assigning tasks to subordinates

Securing from subordinates or from students, faculty, alumni, citizens not directly connected with the publication such material as the following:
 News notes and write-ups on athletics, music, faculty, student organizations, classes, school departments, home-rooms, alumni, community events

Jokes, humorous anecdotes
 Social and personal news items
 Class histories, summaries, prophecies, calendars

Literary products
 Photographs, snapshots, drawings, cartoons, caricatures, diagrams, etc.
 School statistics

Procuring, working up, or writing the above (No 6) personally

Reading, correcting, revising, rewriting or returning copy

Typing or otherwise preparing copy for the printer

Proof reading

Arranging material

Building up exchange files

Reading exchanges

Arranging for the taking of pictures

Corresponding with alumni

Preparing pages, columns, or sections

Consulting authorities on English usage and manuscript preparation

Conducting contests (literary, slogans, school songs, school yells, puzzle solution, etc.)

5. ACTIVITIES OF REPORTERS

Taking assignments from department editor or editor-in-chief

Interviewing students, teachers, principal, citizens, visitors, alumni

Planning interviews, taking notes on interviews, writing up interviews

Studying technique of good news writing

Attending school functions, meetings, contests for purpose of reporting

Working up feature stories

Investigating student activities, problems, complaints, undertakings and writing up

Rewriting

6. ACTIVITIES OF BUSINESS MANAGERS, CIRCULATION MANAGERS, OR ASSISTANTS IN EITHER CASE

Attending and taking part in staff meetings and conferences

Assembling data on which to determine costs, charges, and budget making

Drawing up plans for financing and submitting same for consideration

Organizing and conducting subscription drives

Organizing and conducting advertisement drives

Drawing up list of firms and business men to be solicited for advertising

Presenting the matter of school publication advertising to the chamber of commerce or other associations of business men

Preparing sales talks for use in soliciting advertisements

Writing or otherwise preparing advertisements

Planning special means of raising money such as school entertainments contests, sales, or outright solicitation of contributions

Drawing up necessary forms and blanks for use in subscription taking and advertisement selling

Keeping books, making financial statements, assisting in audits

Collecting money due the publication from subscribers and advertisers

Wrapping, addressing, mailing and otherwise delivering publication

Keeping subscribers' list correct and up to date

7. ACTIVITIES OF STUDENTS NOT OFFICIALLY CONNECTED WITH PUBLICATIONS

Voluntarily contributing notes, jokes, news items, social notes, poems, stories, letters, cartoons, pictures, art work etc.

Contributing above upon request from members of staff

Studying journalistic technique with object of making publication staff

Studying literary technique with object of getting product into publication

Submitting inquiries, lost and found notices, complaints

Criticizing the publications

Subscribing

Reading

Filing

Acting as subscription or advertising solicitor

Taking part in publication contest

Conferring with members of staff in behalf of special causes, undertakings, organizations, or personal advantage

Seeking nomination, election or appointment to staff

Helping elect candidates and tickets

Assisting in the distribution of publications

TYPE SEVEN. DRAMATICS AND PUBLIC SPEAKING: (Plays, pageants, operettas, movies, folk songs and dances: debating, oratory, extemporaneous speaking, school forums, etc.)

REFERENCES:

Blackburn, op. cit., Chaps. V, XI, XV

Foster, op. cit., p. 54

Meyers, op. cit., topics 6, 7, 27

Fretwell, E. K. "Special Types of Activities: Dramatics," op. cit., 25th Yearbook p. 165

Roemer and Allen, op. cit., 214-227

McKown, op. cit., pp. 154-168

Pringle, Ralph W., "Debating," in *Adolescence and High School Problems*, D. C. Heath & Co., 1922 Chapter XIII

1. ACTIVITIES COMMON TO DRAMATICS, PUBLIC SPEAKING AND DEBATING

Practicing control of voice

Cultivating a platform or stage manner

Memorizing a part

Etc.

2. DRAMATICS

(1) Activities in connection with taking part in a play

Trying out

Memorizing part

Learning stage conventions

Interpreting character

Dancing

Singing

Learning stage terminology

Practicing proper control of voice

Assisting at coaching

Assisting at prompting

(2) Activities in connection with supplementary work of a play

Studying historical background of plays

Drawing costume designs

Sewing costumes

Shopping for materials

Studying costumes of historical periods

Choosing costumes from dealers

Preparing receipt slips to be given out with costumes

Distributing and collecting costumes for cast
 Checking and packing costumes for return to dealer
 Checking sales slips of local merchants
 Paying bills to local merchants
 Assisting cast in putting on costumes
 Learning and practicing the art of make-up
 Sewing on property committee
 Borrowing properties from homes and local dealers
 Labelling all borrowed properties
 Making pieces of stage and painting property
 Making diagrams of stage for each scene
 Setting stage
 Writing thank-you notes for borrowed properties
 Drawing designs for stage background
 Shifting scenes
 Operating lights, curtains and drops
 Prompting
 Selling tickets
 Taking tickets at doors
 Balancing expense account
 Making advertising posters
 Securing advertisement in local papers
 Securing advertisement in picture shows
 Announcing play at luncheon clubs, other community gatherings
 (3) Activities in connection with dramatic clubs
 Studying Little Theater movement
 One-act plays
 National drama of other countries
 Relation of motion picture to legitimate plays
 Conducting try-outs
 Coaching
 Dramatizing stories or novels
 Writing original plays
 Giving talks on stage craft
 Arranging for place of club meeting
 Miniature stage work

Making marionettes
 Making marionette stages
 Manipulating marionettes in dramas
 Reading for marionette play
 Putting on pageants
 Studying history for material
 Constructing scenes for pageant
 Providing appropriate costumes
 Selecting music for pageant

3. DEBATING AND PUBLIC SPEAKING

(1) Activities in connection with public speaking and debating organizations:
 Practicing parliamentary procedure
 Selecting questions for debate
 Debating
 Giving talks on inductive reasoning
 Studying argumentation
 Taking part in humorous debates
 Acting out a session of congress
 Acting out a nominating convention
 Impersonating well-known public speakers
 Making announcements in home rooms
 Making speeches advertising school affairs at community gatherings

TYPE EIGHT. MUSICAL ACTIVITIES

REFERENCES:

Roberts and Draper, op. cit., Chap. XI
 Jordan, op. cit., Chap. VIII
 Fretwell, E. K. "Special Types of Activities: Music," *25th Yearbook of National Society* op. cit., 165-75
 McKown, op. cit., Chap. VIII (Contains a very good bibliography)
 National Bureau for the Advancement of Music, 105 West 40th St., New York City
 As a member of orchestras, bands, glee clubs, and other musical organizations students are frequently engaged in the various *Common Activities* listed at the head of this section. They perfect organization, plan concerts, deliberate on club or society problems, and promote musical undertakings. Many of the

specific subjects of deliberation, planning, and promotion may easily be inferred from the following:

1. INSTRUMENTAL MUSIC

Putting instruments together and taking them apart

Casing instruments

Fitting parts

Repairing instruments

Adjusting instruments

Draining, drying, cleaning, polishing, oiling, moistening, and otherwise caring for instruments

Tuning

Holding properly

Fingering, lipping, pedaling, picking, striking, muting, vibrating, rolling, etc.

Applying attachments

Controlling tone, quality, and volume

Phrasing

Reading music

Transposing

Harmonizing

Performing varied technical requirements of music (scales, arpeggios, chords, octaves, double notes, embellishment of all kinds.)

Keeping the beat

Making prompt attacks

Feeling the rhythm

Memorizing

Watching and interpreting the conductor

Following soloist

Practicing alone to perfect skills

Receiving special individual coaching

Training the ear

Arranging and caring for music

Turning pages

Setting up, taking down, or adjusting music stands, platforms, lights

Listening to explanations, directions, and suggestions of conductor or leader

Practicing and demonstrating stage presence and stage conduct

Listening to and accommodating to fellow musicians

Undergoing try-outs

Caring for uniforms

(Occasions for the public exercise of instrumental musical ability in high schools are assemblies, concerts, contests, club and society meetings, home-room programs, dances, banquets, receptions, parties, plays, pageants, tableaux, athletic events, rallies, etc.)

2. VOCAL MUSIC (Activities much the same as under Instrumental, but the following are distinctive.)

Memorizing words of music

Practicing correct breathing

Practicing correct enunciation and pronunciation

Practicing tone production, placement, etc.

Practicing pitch discrimination

Studying verbal meanings

Taking care of the voice (Discriminative eating, exercise, avoidance of colds, strain, yelling, smoking, nervous tension.

"Dressing for the occasion"

Cultivating pleasing facial expression

Developing poise, freedom from mannerism and affectations, self-confidence

(Occasions for the exercise of vocal musical ability are much the same as for instrumental.)

3. MUSIC APPRECIATION CLUBS.

(These may involve all the activities listed above under instrumental and vocal music, but in addition may emphasize the following)

Studying the lives of composers and performers; the folk music; history of music, of opera, of symphony, of church music, musical masterpieces

musical harmony, and composition;
 musical instruments; musical forms,
 technique, principles

Identifying pictures of musicians, musical
 themes, classics, modes, idioms,
 rhythms, performers

Listening to victrolas, player pianos and
 the like

Listening to radio concerts

Reading stories of operas

Managing musical memory contests

Attending concerts, recitals, musical en-
 tertainments, of all kinds

Giving or listening to lectures on music,
 lecture recitals, illustrated talks, etc.

Debating relative merits of kinds of
 music, performers, or performances

Composing individually or co-operatively

Developing critical ability

Writing musical criticism

TYPE NINE. SUBJECT CLUB ACTIVITIES

1. *Vocational clubs*, such as home economics, agriculture, commercial, manual training

2. *Academic clubs*, such as literature, writing, history, mathematics, foreign language, art, music, civics, botany, geography, general science

REFERENCES:

- Blackburn, op. cit., Chs. VII, XIII, XXIII, XXXIII
- Foster, op. cit., pp. 31, 41-42, 46-48, 53-54
- McKown, op. cit., 93-113
- Inglis, Alexander, "The Place of Aesthetic Arts in the Program" in *Principles of Secondary Education* (Boston: Houghton Mifflin Co., 1918) Ch. XVIII
- Pringle, Ralph W. "Adolescence and High School Problems," Chaps. XI and XII
- Ruediger, William C., "Avocational Guidance" in *The Modern High School*, by Johnston and Others, Charles Scribner's Sons, 1914, Chap. XXV
- Thomas-Tindal and Meyers, op. cit., Chap. XIV

United States Department of Agriculture, "Boys' and Girls 4-H Club Work," Miscellaneous Circular Nos. 77 and 85 and others

1. SPECIFIC ACTIVITIES OF STUDENTS IN SOME VOCATIONAL CLUBS

(1) *Home Economics*

Making dresses and hats
 Making a family budget
 Planning menus
 Practice in serving a meal properly
 Planning how to furnish a room
 Making scrap book of home interiors
 Entertaining guests
 Raising chickens
 Making jelly, preserves, etc.
 Exhibiting products at county and state

fairs

Conducting public demonstrations of up to date methods

(2) *Agriculture*

Raising corn
 Raising calves, pigs, etc.
 Building model poultry houses
 Holding exhibits at county and state

fairs

Testing seeds

Testing soil

(3) *Commercial*

Hearing talks by business men
 Reviewing lives of successful business

men

Discussing article from the American magazine

Visiting manufacturing plants and business houses

Making reports upon how local businesses are conducted.

Investigating and reporting on various occupations with a view to vocational guidance

Taking part in typing contests offered by manufacturers of typewriters

Making posters in decorative typing

Taking charge of typing and mimeographing for the other clubs of the school

(4) *Manual training*

Talks on different phases of manual training

Talks on the work of Sheraton, Duncan Fyfe, Hepplewaite, etc.

Study of designs in furniture

Study of period furniture

Visits to furniture factories

Study of oriental rugs

Visits to rug shops

Trips for the purpose of identifying trees

Building stage equipment for school purposes

2. SPECIFIC ACTIVITIES IN SOME ACADEMIC CLUBS

(1) *Literature*—reading clubs such as "Modern Authors," "Book Lovers," "Shakespeare," "Magazine" clubs

Reading certain authors

Studying lives of authors

Studying pictures of certain author's time and country

Visiting homes of authors

Learning quotations

Giving talks about authors

Giving talks about books

Giving literary pageants

Giving literary charades

Writing letters to authors

Impersonating characters in books

Dramatizing scenes from books

Reading literary reviews

Making literary scrap-books

(2) *Writing clubs*

Writing stories, poems, plays, etc.

Criticizing literary work of fellow members

Writing book reviews

Writing minutes in literary style

Writing stories, etc. for prize contests in magazines

(3) *History*

Dramatizing events in history

Giving historical pageants

Giving tableaux of pictures of historical interest

Presenting weddings, banquets, and other ceremonies of ancient countries

Acting out a meeting of the Roman Senate

Acting out a political nominating convention

Impersonating historical characters

Studying coins of various nations

Giving talks accompanied by stereoptican views

Collecting and preserving materials of local history

Marking spots of interest in local history.

Keeping a scrap book of cartoons

Debating on questions related to politics or history

(4) *Mathematics club*

Studying lives of great mathematicians

Giving talks on the use of mathematics in agriculture, industry, chemistry, art, etc.

Explaining mathematical instruments—abacus, slide rule, comptometer

Solving codes and ciphers

Solving mathematical puzzles

Studying mathematical fallacies

Studying mathematics of Hindus, Arabs, Greeks and Egyptians

Making graphic records

(5) *Foreign language clubs* of which the two following are typical

(a) *French club*

Conducting a meeting with parliamentary procedure in the French language.

Singing French songs

Presenting French plays

Giving talks on French customs and traditions

Giving illustrated talks on places of interest in France

- Playing French games
Writing letters to French boys and girls
(b) Latin club
Giving talks on customs of Roman people
Giving a banquet with Roman foods and customs
Playing charades and other Latin games
Singing Latin songs
Solving Latin conundrums
Giving illustrated talks on Roman buildings
Collecting advertisements, cartoons, etc., showing the modern use of the names of the gods and goddesses
(6) *Art club*
Studying and giving talks upon lives of artists
Studying pictures of great artists
Visiting art galleries and exhibits
Visiting studios of artists
Conducting an art exhibit with loaned or rented pictures
Designing scenery for plays
Making posters to advertise school affairs
Making cartoons for school paper
Studying interior decorating
Taking part in prize contests offered by magazines
Taking part in "own-your-own-home" campaigns
Making cover and illustrations for school magazines
(7) *Music club*
(See *Type Eight* of this report)
(8) *Civics club*
Studying local government
Helping with alley-clean-up campaigns
Helping with traffic
Visiting city council, court room, etc.
Studying wages, conditions of work, etc.
Helping with safety-first campaigns
Note: See general *Type Two* of extra-curricular activities
(9) *Science clubs* of which the following are typical
(a) Botany club
Studying and collecting data upon flora in local region
Talks on certain plants, for example, rubber or mahogany—their peculiarities, life habits, and uses
Studying landscape gardening
Talks on plant conservation
Conducting flower shows
Visiting conservatories and gardens
Helping to get rid of plant pests such as Japanese barberry
(b) Geography club
Studying physiography of local region
Making maps of locality
Keeping records of weather observations
Checking the accuracy of government weather reports
Performing experiments such as producing dew, geysers, and volcanoes
Giving programs based on the climate, vegetation, people and industries of some particular country
Visiting places of geographical interest
Discussing articles in National Geographic
(c) General science
Giving talks on scientific subjects
Discussing new inventions and discoveries
Performing experiments in chemistry
Studying lives of great scientists
Studying geology of locality
Discussing application of chemistry or physics in daily life

Giving talks based upon magazine articles

TYPE TEN. MISCELLANEOUS CLUB ACTIVITIES (Radio, camera, collecting, nature, etc.)

REFERENCES:

- Blackburn, op. cit., Chs. VI, IX, XII
 Foster, op. cit., p. 30-31, 57
 McKown, op. cit., 93-113; 512-528
 Meyer, Part VII
 Rohrbach—Miscellaneous Activities
 Cox, op. cit. Chap. VIII
 Ferris, H. J. "Girls Clubs: Their Organization and Management" *A Manual for Workers*. E. P. Sutton Co.
 Hartson, L. D. *Psychology of the Club*, Clark University Press
 Bernheimer, C. S. and Cohen, J. M. *Boys' Clubs*, The Lord Baltimore Press
 Tanssig, C. W. and Meyer, T. A. *The Book of Hobbies*, Minton, Balch & Co.

MODERN INVENTIONS OR MECHANICS CLUBS

1. AIRPLANE CLUB

"Discussing principles of sustained flight, or nomenclature, fuselage, pontoons, airdromes, rudder, wings, and under-carriage; the construction of an airplane; airdromes, repairs, equipment, etc.; the airplane in war and peace; commercial and mail possibilities. Looking over records in aviation; stories of flying by local flyers or mechanics; study from photographs, illustrations, and silhouettes; use of magazines on aviation, air service, and popular mechanics; trips to aviation field, hangars or shops; making and flying of models; the building of a glider or small airplane."

- Reading Popular Mechanics
- Constructing airplanes
- Constructing radios
- Making airplanes (miniature)
- Making kites
- Solving puzzles
- Participating in puzzle contests

Sending and receiving wireless messages

- Visiting radio or electrical shop
- Receiving and reporting college and high school scores
- Constructing toys

2. CAMERA, WEAVING, AND ART WORK CLUBS

- Taking identification pictures for school records
- Taking pictures for annual
- Conducting picture sales
- Visiting photographer's studio
- Studying history of photography
- Experimenting with lenses
- Studying cameras
- Developing and printing films
- Developing plates and films
- Taking pictures—making proofs
- Making lantern slides
- Making enlargements
- Promoting picture contests
- Taking movie pictures, studying lights, shadows, and backgrounds
- Listening to talks on enlarging, developing, colored photography
- Drawing cartoons
- Crocheting laces, yokes, etc.
- Embroidering
- Knitting
- Working with beads
- Crocheting rugs
- Studying rugs of different periods
- Tatting
- Making articles of raffia and reed
- Establishing curiosity shop
- Forming antiquarian society

3. TRAVEL CLUB

Activities: Planning of trips of short duration to near-by points. Planning a two weeks' vacation to some American point or points. Planning European trips of various durations and to various points

Planning a round-the-world-trip

Studying countries represented by members of the club

Learning how to see America first

Studying use of folders and transportation booklets from railroad companies, hotels, chambers of commerce, steamship lines, travel bureaus

Estimating expenses of travel

Finding out luggage needed on trip

Studying each country visited under some such outline as this:

History of country

Contributions

Standards of living

Costumes

Places to visit

Famous men, past and present

Form of government

Relation to America

Strange customs

Art treasures

Traditions and language

Making a library of travel books, novels, descriptions, and magazines

Making a scrap book

Using slides, films, and pictures

Studying foreign names, dances, stories, and songs

4. RADIO CLUB

Receiving and giving instruction in elementary principles of radio

Making radio sets

Visiting radio factories

Listening to radio programs

Transmitting important public addresses

Reading magazine and newspaper articles on radio

Carrying on information box about radio

Studying batteries, their care and use
Broadcasting programs

5. VALET CLUB

Encouraging pride in personal neatness and appearance

Promoting thrift

Freshening and working over old ties

Mending sweaters

Darning socks

Sewing on buttons

Pressing suits

Removing spots

Applying mending tissue and pressing trousers

Washing, drying, and pressing trousers

Mending frayed shirt cuffs

Doing simple cooking

OTHER CLUBS COMING UNDER THE MISCELLANEOUS VARIETY

Collecting, nature, sketch, brush and pencil, wireless, stamps, museum, chess, arts and crafts (crochet, embroidery, knitting, tatting, basketry, clog, modeling, leather work, cardboard modeling), scrap book, cartoon.

The field of miscellaneous clubs is almost unlimited. However, many of the specific activities in this type are the same as are carried on in subject clubs or in other types. No attempt is made to list the specific activities.

TYPE ELEVEN. ASSEMBLIES

REFERENCES:

Foster, op. cit., Chapter VI

Pringle, op. cit., Chapter XVII

Meyer, op. cit. Topic II

Fretwell, E. K. "Extra-curricular Activities of Secondary Schools" (A Bibliography of the High School Assembly) *Teachers College Record* XXV (Jan. 1924) pp. 61-69

Evans, Evan E. "What to Do With the High School Assembly" *The School Review* XXXI (April, 1923) pp. 283-286

Deam and Bear op. cit. pp. 151-55

Roemer and Allen op. cit. Chapter IV

Roberts and Draper op. cit. Chapter IV

Jordan op. cit. Chapter V
McKown op. cit. Chapter V

The specific activities of pupils taking part in assemblies are those already listed under dramatics, public speaking, music, student participation in school control, subject and special interest clubs. The assembly provides merely a larger opportunity for exhibitions than do clubs, committees, councils, and minor organizations. The values of assemblies are very considerably institutional; they relate to the whole school membership perhaps even more than to the individuals or groups performing. Assemblies are calculated to develop morals, school spirit, institutional loyalty; to integrate the members of the school through common experiences emotionally charged; strengthen the functioning of the school in all its departments, and to supplement this functioning particularly in the sides of ethics, aesthetics, vocations, and public spiritedness. The values of assemblies for the student audience will be found distributed widely under the Social, Leisure Time, and Vocational objectives, with immediate relation to fruitful knowledge and desirable attitude.

The listing that follows does not give the specific activities of assembly performances but rather the types of exercises, programs, exhibitions, demonstrations, etc. which are likely to have major values for the student body as a whole—for the audience rather than for the actors. In most cases the performing individuals may be either the principal and the teachers, the pupils themselves, outsiders, or a combination of these. So far as the student body is concerned the worth of an assembly does not depend upon the classification of the platform occupants but upon the content, excellence, and appeal of their activities.

1. TALKS BY PRINCIPAL, PUPILS, OR OUTSIDERS ON SUCH TOPICS AS:

Welcome to freshmen
The care of the building and grounds
School spirit
Good sportsmanship
College entrance requirements
Vocations
School regulations
School student policies
School courses of study
Pupil progress
School marks
School problems
Current public questions
Current events
Travel experiences—travelogues
Support of various school activities,
curricula or extra-curricula
Individual or public health
Education values
Biography
Scientific discoveries
Civic organizations, enterprises, etc.
Art appreciations
Conduct
Character
Personality
Ideals
Success

2. DRAMATICS BY STAFF, PUPILS, OUTSIDERS OR COMBINATION

Dramatic readings
Read plays
Original skits
Pantomimes
Vaudeville
Pageants
Minstrel shows
Puppet shows
Historical dramatizations
Tableaux
Foreign language plays

- Mock trials
Initiations
3. DEMONSTRATIONS
Experiments in physics or chemistry
Science charts
Hobbies or special skills
Typewriting skill
Boy Scouts
Girl Scouts
Style shows
Rapid calculation
Shop practices and techniques
4. MUSICAL ENTERTAINMENT
Numbers or concerts by choruses, glee clubs, quartets, bands, etc.
Solo recitals, instrumental or vocal
Operettas
Community singing
Harmonica contests
Kindergarten band
Progress by musical clubs
Radiola, electrola, ampico, etc.
Radio music
5. PUBLIC SPEAKING
Debates
Declamatory contests
Extemporaneous speaking contests
Readings
Oratorical contests
Speeches for student candidates, school drives, publications, etc.
6. SCHOOL FORUM
Discussion of school problems, issues, proposals
Nomination and election of school officials
Pep meetings
7. RECOGNITION ASSEMBLIES
Athletic awards
Scholarship awards
Citizenship awards
Special ability awards
Distinguished alumni
8. PROGRAMS OR RECITALS BY INDIVIDUAL ENTERTAINERS
Ventriloquism
Magic
Rope throwing
Tumbling
Acrobatic and trapeze performances
Dancing
Bird imitation
Trained animal or bird acts
9. MOVIES
Manufacturing processes
Biological
Travel
Current events
Historical
English classics
Modern plays
Comedies
10. RADIO PROGRAMS
11. SPECIAL DAY PROGRAMS
Thanksgiving
Christmas
Washington's birthday
Lincoln's birthday
Memorial day
Anniversaries
Home coming
- TYPE TWELVE. HOME ROOM ACTIVITIES OF PUPILS
- REFERENCES:
- Fretwell, op. cit. *Teachers College Record* June 1926, pp. 901-29 (an annotated bibliography)
McKown, op. cit. pp. 35-37 (Gives an extended list of specific activities)
Prunty, Merle, *25th Yearbook of National Society*, op. cit. pp. 187-204
Cox, op. cit. Ch. V
Lucy, Micheal H. "Plan of Organization in Julia Richman High School." *Bulletin of the National Association of Secondary School Principals*, 1926, pp. 76-83
Stocking, J. R. "The Detroit House Plan," *Bulletin of the National Association of Secondary School Principals*, 1926, pp. 83-90
"Winfield Manual of Activities, and Adminis-

tration and Outline of Home-Room Study and Activity" Winfield High School, Winfield, Kansas.

Many home room activities have already been listed under the *Common Activities* of deliberation and discussion, study and investigation, organization, and promotion. Others have been indicated under *Type One*, (Participation in School Control.) for those students who officially represent their home rooms in the general organizations. All such activities and others like those listed under music, dramatics, public speaking, and special clubs need be suggested only by general statements in the following list. Certain activities may be regarded as peculiar to home-rooms and as such will be listed specifically.

Deliberative, parliamentary, promotion, and program planning activities (See common Activities A, B, C and D)

Electing officers and representatives

Performing various activities relating to the ordering of the room, the carrying-out of school regulations, the assistance of the home-room teachers as suggested under *Type One*, 4.

Giving musical, dramatic and other programs such as those listed under *Types Seven, Eight, and Eleven*

Studying and discussing school affairs, regulations, curricular offerings, extra-curricular organizations, problems, needs, weaknesses and strengths as in *Assemblies*. See *Type Eleven*

Studying and discussing occupations, hobbies, public questions, ethics, community enterprises, drives, events, etc. as in *Subject Clubs*, (*Type Nine*), *Miscellaneous Clubs*, (*Type Ten*), and *Assemblies* (*Type Eleven*)

Aiding fellow pupils who have fallen behind in their school work

Engaging in contests with other rooms

Conferring with home-room teachers about absence, tardinesses, school grades, election of curricula and subjects, college entrance requirements, makeups, and school difficulties of all kinds

Making out schedules with help of home-room teacher

SECTION IV

BRIEF COMMENT RELATIVE TO THE ATTEMPT TO EVALUATE ACTIVITIES (TYPE ONE) IN TERMS OF ULTIMATE AND IMMEDIATE OBJECTIVES

The group of thirty-two students who attempted to check off the activities (type one) against the objectives represent a class of students having had experience in teaching and in administrative work. Three of the group are superintendents of schools; four had experience in teaching either in teachers colleges or schools of education; and eighteen are at the present time graduate students in the university. Eight of the group have had at least one unit of graduate study in the field of education (one semester meeting at least two hours per week), nine two units, two three units, nine four units, four five units, and ten of them six units or more.

No claim is made as to any final generalizations based upon the tabulated results. The work was seriously done and conscientiously checked by all individuals included. The results represent the "consensus of opinion" of the group as a whole. If this same set of activities were checked by a much larger group the probabilities are that the results would be somewhat similar, assuming that it were done under similar conditions, since the group which did check these activities is representative in type of what one would find in the country as

a whole. Nothing was done previously by way of discussion to prejudice individuals toward any one aspect or another under the objectives listed. Obviously from the tabulated results it may be observed that some students felt more inclined than others to make every activity contribute in some way to all aspects of the respective ultimate objectives and the sub-aspects. This is probably an unavoidable accompaniment whenever subjective estimates of this kind are attempted. But in general when the whole tabulation is taken into account certain modes of emphasis appear where the majority tend to agree both with reference to the sub-activities and in case of a few of the larger categories of activities.

The method used in evaluating *Type I* can be used in case of each of the other types. It must be understood that it requires a great deal of time to make such an evaluation both with reference to each individual and also with reference to the total tabulations. In the first instance, the time put upon evaluations by individuals ranged from two to six hours or more. Four or five sections of undergraduates were used in making the summaries. One person directed, another counted through show of hands the number of estimates made by the original thirty-two as found recorded on the sheets in the hands of the undergraduates, and a third recorded the total results. Finally an adding machine was used for making the totals that appear in the tabulated results. The total amount of time consumed by persons who made the original estimates or evaluations plus the time consumed by the persons making the summary for all persons involved in doing this work is equal to approximately 730 or 735 hours of work. By simplifying the items used in the

original sheets for evaluating type one and avoiding some of the obvious duplications, it would be possible to make it more practicable to attempt to evaluate the other types later on.

Too much should not be claimed for the significance of the tabulations made. The total number of checkings it will be observed from the first four columns amounts to 2618 for the health objective; for the leisure objective in the next four columns, 6602; for the social in the next four columns, 9545; and for the vocational objective in the last four columns, 6958. These totals are relatively what one would probably have anticipated, namely, that the social and the leisure objectives would run high. Whether the total on the vocational objective is higher than it might have been had a more detailed explanation been given as to what was implied by this objective, cannot be answered on the basis of any evidence at present, relative to this group which made the original checkings.

If one observes the summary results it will be discovered that when only those items that received ten or more checkings are considered, somewhat more significant tendencies are manifest. When this is done the emphasis bulks largest upon the social and leisure objectives which perhaps is not only what would be expected, but results in what can be justified in theory and practice. The vocational objective appears to be too heavily loaded or emphasized to be justified to the same degree as in case of the social and leisure objectives. Furthermore certain items under each of the larger division of activities appear to be regarded as more consequential than others. When the table is observed especially in terms of the checkings which amounted to ten or more such tendencies

I. Student Control and Development of School Spirit

1. Managing school traffic

	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
Patrolling halls	2	13	5	15	....	17	1	11	5	19	7	15	3	3	2	14 = 97
Directing pupils	4	7	5	10	4	11	3	8	9	17	9	18	8	3	3	14 = 133
Conducting pupils or groups of pupils	4	8	4	8	8	11	5	12	12	24	11	18	11	8	5	14 = 163
Maintaining lines where necessary .....	....	8	3	7	2	11	2	12	6	18	8	21	3	5	1	12 = 119
Warning pupils	4	8	3	9	2	10	2	10	7	14	8	17	....	5	2	11 = 112
Checking disturbances	2	6	4	11	3	10	6	11	7	18	10	20	2	6	5	10 = 131
Reporting persistent violators of regulations.....	2	5	5	8	4	7	6	7	5	21	13	17	3	6	5	8 = 122

2. Supervising pupils in lunch rooms

Directing the seating.....	6	6	3	9	2	5	6	10	13	20	10	27	10	4	7	13 = 151
Governing the routing	2	6	2	10	4	4	5	9	12	15	14	18	12	4	9	13 = 139
Directing disposition of trays and dishes.....	3	5	6	9	2	6	4	9	7	13	9	20	12	6	8	17 = 136
Checking undue noise or confusion.....	2	8	4	5	3	11	3	10	8	19	10	20	6	3	7	15 = 134

3. Supervising pupils in study halls

Watching pupils	4	7	4	8	3	10	8	8	8	19	13	20	7	10	8	9 = 146
Warning pupils who are out of order.....	1	9	5	8	1	12	6	10	5	22	11	19	4	9	5	7 = 134
Reporting the persistently unruly	1	6	4	6	2	10	3	10	7	24	15	18	3	8	5	7 = 129

4. Supervising school assemblies

Ushering	4	6	2	8	7	7	4	8	14	18	9	22	12	8	10	16 = 155
Directing the seating	5	5	3	8	3	7	5	6	9	13	12	21	9	6	11	12 = 138
Making room for visitors	2	6	3	5	2	8	3	6	12	19	13	21	5	9	6	7 = 127
Warning, checking, reporting pupils	2	5	3	7	5	9	4	11	9	20	15	18	4	8	5	9 = 134

5. Supervising pupils similarly as above in classrooms, home rooms, libraries, laboratories, shops, and elsewhere in the building and on the playgrounds or athletic fields

4	7	3	14	10	14	10	18	12	21	14	20	10	13	11	17	198
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6. Participating in the trial of pupils charged with misbehavior

Stating and supporting charges	3	4	1	4	8	9	6	13	21	17	16	11	13	12	14 = 162
Acting as judge, member of jury, or member of judicial group	1	3	7	1	8	11	14	10	16	23	23	17	11	13	12	14 = 184
Deciding on penalties and impositions.....	1	2	7	1	2	7	10	2	12	18	20	15	7	8	13	11 = 136

PUPIL ACTIVITIES

OBJECTIVES

	Health			Leisure			Social			Vocational		
	A	B	C	D	A	B	C	D	A	B	C	D
7. Controlling and directing pupils in mass meetings, general student organization meetings, demonstrations, parades, rallies.....	4	5	2	6	11	19	10	14	15	27	18	23
8. Acting as cheer leaders.....	4	7	3	8	9	16	9	14	14	23	13	15
9. Conducting pep assemblies, parades, demonstrations.....	2	3	1	6	7	16	14	11	11	18	17	14
10. Teaching school yells and songs.....	4	.....	1	8	10	15	14	9	10	18	11	12
11. Adopting school emblems, insignia, colors, yells.....	1	.....	.....	2	6	11	4	5	8	18	15	9
12. Promoting school ideals, courtesy, patriotism, honesty. See Activ. Type D.....	2	3	1	4	8	19	9	11	14	24	17	21
II. Student benefit, welfare, and adjustment	.....	1	.....	1	11	6	5	12	13	17	11	18
1. Conducting lost and found bureau.....	1	.....	.....	3	10	7	4	10	11	11	6	11
2. Conducting book exchange.....	3	1	1	4	8	9	7	8	10	8	12	12
3. Conducting employment bureau.....	2	2	1	3	9	9	6	6	14	14	12	12
4. Conducting an information bureau.....	1	2	2	4	3	9	7	8	6	22	12	16
5. Guarding cloak rooms and lockers.....	1	4	1	4	7	11	4	9	12	24	14	20
6. Guiding new students.....	2	4	2	2	6	10	6	10	20	25	17	17
7. Explaining to new students the course of study, school requirements, regulations, procedures, and the like.....	1	4	1	2	9	13	3	10	14	23	16	18
8. Acting as "big brother" or "big sister" to beginning students.....	1	3	1	1	10	13	7	10	17	25	13	17
9. Explaining the high school to elementary school pupils.....	13	13	10	17	5	8	6	10	10	20	10	13
10. Providing for student safety	13	13	12	18	4	6	7	5	6	13	10	15
Street crossing regulations.....	10	9	6	13	5	5	5	6	6	8	6	12
Fire drills.....	18	22	15	19	2	7	4	7	8	21	10	14
Exit placards and direction placards.....	11	11	11	16	5	10	6	8	11	16	8	18
Reporting contagious diseases.....	22	22	17	19	4	6	3	6	18	20	14	17
Automobile regulations.....	20	24	16	15	4	8	3	7	11	18	12	16
Reporting unsanitary conditions in eating places	25	22	16	21	6	7	4	7	14	15	15	17
Correcting or reporting unsanitary conditions in school.....	20	22	16	21	6	7	4	7	14	15	15	17
Developing first aid and emergency service.....	25	22	16	21	6	7	4	7	14	15	15	17

PUPIL ACTIVITIES

OBJECTIVES

	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
11. Welfare work among students.....	11	11	11	8	5	14	10	12	15	24	20	20	8	9	4	12 = 194
12. Ministering to the absent ill	13	14	10	15	6	12	6	7	16	20	12	17	12	8	6	9 = 183
13. Providing food and milk in needy cases.....	19	18	10	19	8	10	5	4	13	23	13	17	8	8	2	3 = 180
14. Creating and accumulating scholarships.....	1	2	...	1	7	10	5	8	14	23	17	15	10	7	5	10 = 125
15. Stimulating acquaintance among pupils	1	1	...	2	10	15	7	13	17	23	16	23	4	5	3	4 = 144
16. Checking and caring for bicycles .....	...	1	...	2	4	7	2	8	5	12	9	14	8	9	4	9 = 94
17. Interviewing school authorities in behalf of individual students, groups or the whole student body	1	...	...	...	9	12	4	5	17	23	17	17	5	7	6	11 = 134
III. Promotion, Organization, and Supervision of Extra-Curricular Activities:																
1. Conducting "drives," "weeks," and special school campaigns																
Clean up week	13	22	12	22	9	12	5	16	15	23	16	24	5	8	4	14 = 220
Good English week	2	...	...	...	17	17	10	19	17	17	10	22	10	10	3	13 = 157
Safety week	22	19	12	18	12	7	6	14	17	17	13	20	7	7	5	6 = 202
Education week	10	6	5	7	20	16	12	14	19	20	18	18	15	11	9	12 = 212
Fire prevention week	14	17	11	19	10	6	6	7	18	19	14	20	7	7	3	12 = 180
2. Raising funds for publications, athletics, debates, bands, orchestras, entertainments, assembly programs																
Selling candy, hot dogs, etc.....	1	2	1	1	5	11	7	10	8	12	14	14	17	15	9	17 = 144
Selling tickets .....	...	2	...	...	4	10	6	10	7	17	10	14	15	11	9	17 = 131
Soliciting subscriptions	2	3	1	1	4	13	9	11	9	18	12	16	21	12	13	19 = 164
3. Conducting general school enterprises																
Carnivals	3	2	1	3	16	21	15	14	16	25	17	22	17	13	17	14 = 215
Pageants	4	2	3	3	16	20	18	17	13	23	16	19	19	8	10	12 = 203
Circuses	2	3	1	5	15	21	15	16	15	21	18	20	12	8	10	12 = 194
Exhibits	3	2	2	2	15	18	13	12	15	20	16	18	13	10	10	13 = 182
Home-comings	2	2	1	3	11	19	14	12	15	23	20	19	9	7	7	11 = 175
4. Arranging for assembly programs																
Getting speakers	1	...	1	...	11	12	12	10	20	18	18	18	12	8	10	10 = 161
Getting educational films	5	2	6	4	12	13	13	11	17	20	14	17	13	7	8	10 = 172
Getting music	1	...	2	...	11	14	12	14	15	20	16	16	9	6	7	11 = 154

PUPIL ACTIVITIES

OBJECTIVES

	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
IV. Assistance to Teachers in their managerial, teaching and clerical duties																
1. Helping in the library																
Checking books in and out.....	1	1	...	...	9	9	9	12	11	7	8	12	22	14	15	22 = 152
Arranging books on shelves.....	1	...	1	...	9	8	10	11	8	8	10	10	22	15	12	22 = 147
Finding and delivering books.....	1	...	1	...	7	8	6	9	10	7	11	10	19	12	12	20 = 132
Arranging book exhibits.....	3	1	...	...	1	11	9	10	15	14	11	12	22	15	15	18 = 168
Seating pupils.....	3	3	1	...	4	5	6	5	10	12	12	11	12	8	9	11 = 114
Checking pupil passes, permits, etc.....	1	2	...	...	1	5	8	7	6	5	15	12	11	15	10	10 = 118
Helping pupils.....	3	1	...	...	3	6	7	8	8	13	14	12	16	8	9	11 = 133
Cataloging and filing.....	1	2	...	...	7	5	9	7	8	7	9	7	20	17	12	25 = 136
Attending to physical conditions of room.....	18	13	18	19	8	7	8	9	12	10	9	10	12	10	8	14 = 185
2. Helping in class rooms																
Attending to physical conditions.....	17	15	17	19	6	4	7	9	10	12	10	13	12	8	10	13 = 182
Keeping attendance.....	2	1	...	...	3	5	5	4	6	2	9	4	8	11	6	14 = 88
Distributing and collecting papers, materials, experimental equipment.....	2	...	...	...	2	4	9	5	11	3	12	9	9	12	6	9
Conducting contests.....	3	1	...	...	3	8	10	9	10	12	15	11	16	18	10	10
Gathering material for illustrative purposes.....	1	2	...	...	2	3	11	10	15	13	5	9	9	10	14	15 = 154
Clerical work.....	...	...	...	...	1	1	7	3	5	7	5	7	11	21	15	10
Substituting for absent teacher.....	3	2	1	...	3	5	7	5	7	12	17	14	20	24	20	25 = 131
Taking care of bulletin board.....	2	1	1	...	2	6	7	7	9	6	10	10	11	12	8	18 = 189
3. Helping in home rooms																
Attending to physical conditions.....	15	18	17	18	3	3	7	5	6	11	9	7	10	7	6	9 = 151
Keeping attendance.....	1	1	1	...	3	4	5	6	7	4	12	7	7	11	6	11 = 92
Conducting contests.....	1	1	...	...	4	10	8	11	8	11	14	12	14	11	8	8
Caring for bulletin boards.....	1	1	1	...	4	8	9	7	10	4	15	10	13	8	10	11 = 122
Making announcements.....	2	1	1	...	2	6	8	5	7	15	10	16	13	10	7	18 = 131
Representing causes, drives, etc.....	2	2	2	...	1	10	12	9	8	15	14	13	16	15	9	8
Explaining school procedures.....	2	1	1	...	3	4	9	7	8	7	14	10	14	13	10	9
Conducting election of representatives.....	1	...	...	...	1	8	7	6	8	15	12	14	18	14	11	9
Making out home room programs.....	1	3	2	1	9	10	9	10	12	10	9	9	15	13	11	11 = 135
Writing up home room notes.....	2	1	1	...	3	12	9	7	11	10	7	10	12	8	8	14 = 127

OBJECTIVES

PUPIL ACTIVITIES

	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
V. Motivation of curricular work																
1. Discussing how to study problems in home rooms or special groups	4	3	3	3	7	8	5	5	13	13	11	14	10	10	5	8 = 132
2. Checking on scholarship of home rooms, class society or other student groups.....	2	2	...	1	10	7	7	7	6	10	10	9	9	8	5	8 = 101
3. Making scholarship speeches	2	2	...	2	7	11	5	8	11	17	8	17	15	9	8	10 = 130
4. Giving publicity to honor roll pupils.....	1	2	...	2	3	8	4	5	7	20	7	14	4	5	5	8 = 95
5. Giving publicity to honor societies.....	...	1	...	1	4	10	5	5	5	20	10	12	7	8	5	9 = 102
6. Conducting scholarship contests between home rooms, classes, or other groups	1	1	...	1	8	13	8	8	14	20	14	14	10	7	6	10 = 135
7. Securing honor study halls .....	...	...	...	1	3	10	5	5	11	24	11	14	2	4	4	4 = 112
8. Setting scholarship qualifications for admission to student organizations or offices	2	1	1	1	3	11	7	6	8	18	13	17	7	7	6	6 = 114
9. Arranging for scholarship rewards and prizes.....	2	1	1	1	4	11	6	7	10	17	11	10	9	9	5	3 = 107
10. Helping the individual pupils improve their work	3	2	2	2	11	13	10	13	17	22	16	16	8	9	8	8 = 160
11. Preparing scholarship publicity	1	...	1	1	4	10	5	8	6	17	6	13	10	7	6	11 = 105
12. Collecting or preparing materials for instructional purposes, educational exhibits, museums.....	2	1	3	...	8	8	8	9	15	12	13	12	17	17	12	16 = 153
VI. Assistance in carrying out administrative systems, regulations, routine																
1. Care of general bulletin boards																
Posting	2	1	2	1	7	7	5	10	6	6	8	10	11	7	10	17 = 110
Removing old materials .....	...	1	1	2	9	5	4	11	6	7	7	13	2	6	7	11 = 92
Arranging materials	1	2	1	1	8	9	7	14	5	10	9	11	11	8	10	11 = 118
Watching for improper material	1	2	3	1	6	7	7	14	3	6	9	10	10	8	10	7 = 104
2. Acting as messengers																
Between office and teachers and pupils.....	...	2	1	...	6	8	6	11	8	14	14	16	10	6	4	12 = 118
Between teachers and teachers and pupils.....	...	2	1	...	6	7	5	10	11	12	13	15	7	6	5	11 = 111
Between visiting parents and teachers and pupils .....	...	2	1	...	5	5	6	8	12	17	10	17	9	4	4	8 = 108
3. Keeping attendance																
Supervision of tardiness	3	1	1	2	3	5	3	6	8	10	10	15	10	4	3	12 = 96
Collection of attendance reports.....	1	2	...	...	3	6	4	6	7	9	8	13	9	6	6	15 = 95
Transcription of attendance reports	1	...	...	...	5	6	3	9	7	10	9	13	11	5	5	14 = 98
Filing excuses	1	1	...	...	3	5	3	6	7	14	10	14	11	4	6	13 = 98
Inquiring about absentees	3	1	1	1	6	3	1	9	11	14	11	16	6	3	5	11 = 102

OBJECTIVES

PUPIL ACTIVITIES

PUPIL ACTIVITIES	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
4. Answering telephone	1	...	...	...	6	5	3	9	7	10	10	12	14	12	8	11 = 108
5. Tending office counter .....	...	1	...	...	8	5	5	9	6	10	9	11	16	13	9	21 = 123
6. Clerical work of all kinds	1	1	2	1	5	3	10	7	7	6	8	11	16	15	17	19 = 129
7. Helping with registration																
Directing pupils	1	2	1	3	3	8	9	7	10	12	14	15	9	9	10	12 = 125
Transcribing data	1	...	...	...	4	4	3	6	7	8	8	9	16	12	15 = 105	
Tabulating data .....	...	1	...	...	1	3	4	6	6	9	9	4	12	15	11	12 = 110
Representing teachers	2	1	1	...	3	2	7	7	7	10	14	14	13	12	12	16 = 121
Giving information	1	3	1	2	3	7	7	7	11	12	14	15	11	9	8	11 = 122
Distributing blanks	1	1	...	...	5	4	4	4	9	8	7	11	8	7	7	10 = 86
Checking returns	1	...	1	...	6	5	3	7	7	7	7	8	14	8	8	13 = 95
VII. Care of buildings, grounds, equipment and supplies																
1. Acting on waste paper squad	5	8	8	9	5	11	4	6	7	15	10	14	5	6	3	6 = 122
2. Acting on ground squad																
Removing paper and litter	7	13	9	16	...	8	5	11	6	13	11	16	6	5	2	8 = 136
Suggesting regulations	6	6	7	7	4	6	8	4	7	18	17	15	6	6	5	7 = 128
Making proposals for improvement	5	7	7	9	4	6	6	6	7	9	12	10	8	7	7	7 = 117
3. Care of statuary, paintings, exhibit cases	4	3	2	3	9	13	9	17	4	15	11	13	12	12	7	12 = 146
4. Repairing school equipment	3	2	2	2	7	6	4	6	8	15	7	12	16	16	12	17 = 135
5. Repairing damages or removing defacements	3	2	2	2	4	5	4	7	10	17	10	14	12	12	9	17 = 136
6. Landscaping grounds	1	2	2	1	12	13	15	13	15	13	10	11	19	19	12	15 = 173
VIII. Establishing of satisfactory relationships with home and community																
1. Putting on school exhibits																
Planning, organizing, promoting (See General Activities A, B, C, D)	5	5	2	4	11	16	16	9	10	20	16	13	13	12	10	14 = 176
Hanging, posting, mounting, arranging, decorating	3	7	2	3	11	15	13	13	11	17	12	14	15	13	13	17 = 179
Directing, guiding, assisting, and informing visitors	3	2	1	2	7	11	7	12	13	21	14	18	10	9	7	9 = 146

OBJECTIVES

PUPIL ACTIVITIES

	Health				Leisure				Social				Vocational			
	A	B	C	D	A	B	C	D	A	B	C	D	A	B	C	D
2. Defending the school from exploitation and misrepresentation																
Securing the "facts of the case" and giving proper publicity to same	4	3	2	2	6	11	11	8	18	22	19	15	8	12	5	8 = 154
Disciplining or reporting students, purveyors of untruthful gossip	3	3	2	2	6	12	7	10	17	25	16	20	10	11	6	10 = 170
Creating student concern for the good name of the school through publications, school platforms, group and individual conferences, concerted drives	2	4	4	3	9	15	14	13	16	26	18	22	11	12	8	5 = 182
3. Co-operating with home and community																
Helping parent-teacher association with projects	5	5	3	4	11	18	7	14	17	25	17	19	8	8	6	8 = 175
Contributing services to community undertakings	5	7	4	5	13	22	11	18	20	22	20	23	12	11	6	9 = 204
Putting on father and son, mother and daughter banquets	4	4	4	3	12	18	8	16	17	25	18	21	8	9	4	9 = 180
4. Advertising the school and its work																
Through speeches before community organizations	6	4	3	3	13	15	13	12	16	22	16	17	15	13	11	13 = 192
School columns in the local press	2	2	2	3	8	12	10	13	9	14	14	11	17	12	13	17 = 159
Occasional bulletin sent to homes	4	3	2	2	7	12	7	10	11	21	16	16	17	13	10	15 = 166
Public entertainments and demonstrations	4	7	3	6	14	16	12	15	13	21	16	17	14	14	9	14 = 195
Totals	628	701	502	787	1,227	1,585	1,221	1,569	1,970	2,783	2,134	2,658	1,914	1,592	1,329	2,123 24,423

III. Quantitative Standards

PROGRESS REPORT OF THE SUB-COMMITTEE ON PHYSICS ON THE DEVELOPMENT OF QUANTITATIVE UNITS FOR HIGH SCHOOL PHYSICS*

Types of material for teaching units were suggested in the reports on qualitative units, published in the March Quarterly, 1927. The development of quantitative units involves other considerations. If the general kinds of material are suggested by the qualitative outlines, the amount of material for instructional purposes is the desideratum in the quantitative outline. "How much to accomplish in a given time?" is the question to answer. Obviously this is not a question to be answered off-hand by any one. It demands (1) tentative selection, (2) experimental try-outs (3) the collection of factual data on achievement in relation to the outstanding factors determining achievement, (4) the interpretation of the factual data which are gathered, and (5) further procedures dependent on the results of the previous steps. As the tentative selection mentioned in (1) is based upon certain ultimate and immediate aims and objectives, the experimental try-outs involve testing to determine whether or not the stated purposes have been achieved. There must be test material, therefore, designed to test the various outcomes for which the units were designed. Such a program is large

and not to be accomplished in a short time. The committee believes, however, that progress is more likely to come through an immediate attack on the problem. Therefore, the progress report here presented. The work done so far, it is believed, has already pointed the way toward further immediate desirable procedures.

Five teaching units, constituting a portion of a year's course in high school physics have been prepared for experimental try-outs and used for instruction in ten classes in four schools, taught by five different teachers. The subject of each unit was selected after a careful consideration of everyday life situations involving principles or laws of physics. The titles of the five units so far developed are as follows:

I. What are hydrometers, for what are they used, and how do they illustrate an essential phase of science?

II. What are machines and of what value are they?

III. Principles of liquid and gas pressure and their applications in water and gas supply systems.

IV. Applications of the principles of fluid pressure in water and air craft.

V. Heating, ventilating, and humidifying systems.

The ultimate aims for which each unit was designed were next selected. Knowledge elements designed to accomplish these aims were next listed, with particular attention paid to preparatory knowledge, knowledge functioning in discover-

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ing and developing dispositions and abilities, and knowledge functioning in every day life situations. Techniques were then listed for the accomplishment of the ultimate objectives, with particular attention paid to the solution of problems, and tabulation of experimental data useful in their solution. Appreciations were next listed, and finally habits and skills.

pupils were directed for help.

For the collection of data on achievement, a fairly comprehensive test for each unit was prepared, designed to measure attainment in knowledge, techniques, and appreciation. These were given in the classes mentioned preliminary to instruction, and repeated at the end of the instructional period. An ex-

Table I. DISTRIBUTION of Scores in Preliminary and Final Tests I
Possible Score—73

Score	Pre-Test		Final Test
0—4.9	|||||	53	1
5—9.9	|||||	51	1
10—14.9	|||||	42	8
15—19.9	|||||	36	15
20—24.9	|||||	24	27
25—29.9	|||||	11	42
30—34.9	|||||	4	35
35—39.9	|||||	1	24
40—44.9	|||||	1	26
45—49.9	|||||	0	24
50—54.9	|||||	0	8
55—59.9	|||||	0	8
60—64.9	|||||	0	4
		223	223
Mean	12.21 ± 1.49		33.84 ± .8
S. D.	8.35		11.95

These four lists of immediate objectives were stated in terms of activities of pupils. Each unit was actually a list of pupil activities designed to accomplish certain immediate objectives which in turn were meant to further the accomplishment of the ultimate aims.

The first three immediate aims were stressed in all the units. The last, habits and skills, was thought to be largely a matter of repetition of, and drill in, the activities in the preceding lists. The lists so far mentioned were common activities for all pupils. A supplementary list of suggested activities was added to care for the more capable or problem pupils. Added to these were lists of textbooks and other reference books to which

experimental period of three weeks was selected as a tentative basis of time for each unit. Final time limits will be set by the results from the experimental try-outs.

Factual data collected so far are largely in the form of preliminary and final test distributions; percentages of all pupils giving correct responses to test items; test distributions to seniors contrasted with the total group containing juniors as well; test distributions of those having had general science for purposes of comparison; coefficients of correlation; and extra projects carried on by individual pupils. This material will be presented here for the units for which it has been tabulated, and some interpretations at-

tempted. Complete records have been kept for each pupil.

Table I shows a distribution of scores in preliminary and final administrations of Test I for 223 pupils, the time elapsing between the tests being approximately three weeks. Some slight deviations in certain classes were unavoidable. Standard errors are indicated in all statistical work.

The distributions show a decided effect of instruction, the change being from a skewed distribution with scores piled up at the low end, toward a distribution resembling a normal distribution. What was desired was a final distribution with scores piled upon toward the upper end.

note here that no method was stipulated in these first try-outs. The instructor was asked to use any method which he thought wise. The units, as devised, lend themselves to any treatment desired in method. The present try-out may be considered as a variation-in-methods plan.

Table II shows the distribution of the two classes in the University High School at the University of Minnesota. There were various factors which might explain these distributions. They are given to show conditions more likely to result after considerable time has been spent by the instructor in orientating himself and his pupils to the general plan

Table II. DISTRIBUTIONS—Test I, Preliminary and Final, U. H. S.

Score	Pre-test	Final Test
0—3.9	|	1
4—7.9	|||	3
8—11.9	|||||||	10
12—15.9	|||||||	8
16—19.9	|||||||	9
20—23.9	|||	4
24—27.9	|	1 ||
28—31.9		0
32—35.9		0 ||
36—39.9	|	1
40—43.9		0 |||
44—47.9		0 |||||||||
48—51.9		0 |||||
52—55.9		0 ||||
56—59.9		0 ||||
60—63.9		0 |||
64—67.9		0 |
68—71.9		0
		—
		37
Mean	14.88	48.80
S. D.	6.48	9.00

Whether this is possible, or feasible considering the time limit is a question to be decided by further experimental trials with differing time limits and perhaps variations in method to select the one best accomplishing results. It is well to

of the units. In justice to the cooperating schools, it must be said, that the time for proper orientation to the general scheme was much too short. Further trials will obviate this difficulty.

These distributions show the same gen-

Table III. DISTRIBUTION of Scores, Test I, Seniors

Score	Pre-Test	Final Test
0—4.9	|||||	6 | 1
5—9.9	|||||	14 | 0
10—14.9	|||||	15 || 2
15—19.9	|||||	14 | 1
20—24.9	|||||	7 ||| 3
25—29.9	|||	3 ||||| 6
30—34.9	|	1 ||||| 11
35—39.9	|	1 ||||| 7
40—44.9	|	1 ||||| 10
45—49.9	|	0 ||||| 12
50—54.9	|	0 ||| 4
55—59.9	|	0 ||| 5
60—64.9	|	0 ||| 4
	62	66
Mean	14.59 ± 1.06	40.00 ± 1.58
S. D.	8.35	12.80
Difference between Means and Means of Total Group—		
	2.38 ± 1.83	6.16 ± 1.77
Difference ÷ S. E. of Diff.	1.30	3.48

Table IV. DISTRIBUTION—Test I, of Those Having Had General Science

0—4.9	|||||	11	
5—9.9	|||||	20	
10—14.9	|||||	17 ||	2
15—19.9	|||||	15 ||||	6
20—24.9	|||||	7 |||||	7
25—29.9	|	1 |||||	9
30—34.9	||	2 |||||	12
35—39.9	|	1 |||	4
40—44.9	|	0 |||||	10
45—49.9	|	0 |||||	13
50—54.9	|	0 ||||	6
55—59.9	|	0 |||	3
60—64.9	|	0 |||	3
		74	75
Mean	12.7		37.76 ± 1.4
S. D.	7.40		12.60

Difference ÷ S. D. of Difference = 2.6 for Means for Final of Total Group and those having had General Science.

eral trends as in Table I but a somewhat greater shifting from preliminary to final test.

Table III presents a distribution for seniors, with statistical comparisons with the total group.

A significantly higher mean score for the seniors is shown, indicating that the

seniors more nearly accomplished the objectives measured by the test than the juniors. The objectives of this unit were therefore better accomplished by seniors. "Could the unit be taught well in the ninth grade?" is a question to be answered. The data indicate that it may be better taught in the twelfth than in the eleventh in the schools included here.

Table IV shows the distribution of those having had general science.

The data indicate value in having general science. In other words, in order to accomplish the objectives, it was valuable for the average pupil first to have studied general science.

Table V shows distributions of the

various schools on the appreciation paragraphs included in Test I. These paragraphs are expressions of certain types of appreciation with deleted key words. Whether or not they measure this element well is unknown. They have not been used heretofore. Their validity has not been established.

Table V. DISTRIBUTION of Scores—Appreciation Paragraphs, Test I

Possible Score—22

U. H. S. SCHOOL 1

Score	Pre-Test		Final Test
0—1.9	|||||||	9	
2—3.9	||||	4	
4—5.9	||||	5	
6—7.9	|||||||	9	
8—9.9	|||||	6	||| 3
10—11.9	|||	3	||||||| 8
12—13.9	|	1	||||| 5
14—15.9		0	||||||| 10
16—17.9		0	||||| 5
18—19.9		0	||| 3
20—21.9		0	||| 3
		Total—37	Total—37

SCHOOL 2

0—1.9	|||	3	|	1
2—3.9	||||	4	||	2
4—5.9	|||	3	|	1
6—7.9	|	1	|||	4
8—9.9	|||	3	|||	4
10—11.9		0	||	2
12—13.9	|	1	|	1
		<hr/> Total—15		<hr/> Total—15

SCHOOL 3

0—1.9	|||||||	11	|	1
2—3.9	|||||||	8	||||	5
4—5.9	|||||||	10	||||	5
6—7.9	|||||||	17	|||||||	16
8—9.9	|||||	6	|||||||	14
10—11.9	|||||	7	|||||||	12
12—13.9	|||	3	|||	5
14—15.9	|	2	|||||	7
16—17.9	|	1	||	2
		Total—65		Total—67

Table V. DISTRIBUTION of Scores—Appreciation Paragraphs, Test I
Possible Score—22
SCHOOL 4a

Score	Pre-Test		Final Test	
0—1.9	|||||	54	|||||	11
2—3.9	||||	5	|||	3
4—5.9	||||	5	|||||	10
6—7.9	|||	3	|||||	21
8—9.9	|||	3	|||||	9
10—11.9		0	|||||	11
12—13.9		0	||	2
14—15.9		0		0
16—17.9		0	|	1
18—19.9		0	|	1
20—21.9		0	|	1
		Total—70		

SCHOOL 4b

0—1.9	|||||	19	|	1
2—3.9	|||	4	|||	4
4—5.9	|	1	|||	3
6—7.9	|	1	|||	4
8—9.9	|||	5	|||	3
10—11.9		0	|||||	6
12—13.9		0	|||	4
14—15.9		0	||	2
16—17.9		0	|	2
18—19.9		0		0
20—21.9		0	|	1
		Total—30		

It is noticed that in the University High School, there was a decided shift of scores from low to high from preliminary to final test. This is not so noticeable in the other schools probably because, due to the lack of orientation spoken of above, plans were not so carefully laid to accomplish it. Table VI shows the numbers and percents of pupils giving correct responses to items in Test I, preliminary and final.

An examination of this table shows that no item in the test had 100% correct responses by all pupils, though there are two items, 4 and 35, to which there are 100% correct responses by University high school pupils. Items 45-48 are omitted in the table because they cannot

be tabulated in this manner conveniently. Items 45-47 inclusive are appreciation paragraphs, and item 48 is a tabulation.

Just what is the value of lists like those shown in Table VI? In the first place, they show that, to the extent that the items measure the objectives set up, the objectives have not been thoroughly accomplished. Whether or not they can ever be accomplished to the degree of 100% correct response, is a matter to be determined by experiment. Extension of time given to a unit, and the devising of methods specifically to make possible 100% correct responses are among eventualities to be tried out. Second, some items show such a small number of correct responses, that their elim-

Table VI. Numbers and Per Cents of Pupils Giving Correct Responses to Items in Test I

ITEMS	U. H. S.			H. S. 4			H. S. 3			H. S. 2			TOTAL							
	38-Pre		40-Final	112-Pre		116-Final	70-Pre		67-Final	19-Pre		16-Final	239-Pre		239-Final					
	No.	%		No.	%		No.	%		No.	%		No.	%		No.	%			
1	27	71	36	90	81	72	101	87	58	83	64	95	14	74	15	94	180	75	216	90
2	31	82	40	100	905	93	112	96	66	94	65	97	12	63	12	75	214	89	229	96
3	15	39	37	92	52	46	106	91	53	76	57	85	6	31	11	69	126	53	211	88
4	5	13	35	87	4	4	103	89	23	33	62	92	1	5	9	56	33	14	209	87
5	21	55	35	87	38	34	80	69	53	76	58	86	5	31	10	62	117	49	183	77
6	32	84	34	85	80	71	99	85	54	77	60	89	8	42	12	75	174	73	205	86
7	14	37	33	82	15	13	75	65	29	41	42	63	6	31	11	69	64	27	161	67
8	11	29	34	85	16	14	70	60	21	30	26	39	10	53	12	75	58	24	142	59
9	0	0	37	92	6	5	82	71	55	79	55	82	8	42	13	81	69	29	187	78
10	8	21	35	87	10	9	97	84	54	77	60	89	15	79	13	81	87	36	205	86
11	2	5	37	92	1	1	97	84	33	47	61	91	0	0	12	75	36*	15	207	87
12	3	8	29	72	2	2	44	38	16	23	30	45	3	16	10	62	24	10	113	47
13	2	5	30	75	2	2	42	36	11	16	25	37	3	16	8	50	18	7	105	44
14	1	3	35	87	8	7	65	56	59	84	56	83	14	74	15	94	82	34	171	71
15	0	0	31	77	2	2	39	34	5	7	26	39	1	5	2	12	8	3	98	41
16	2	5	25	62	1	1	43	37	21	30	27	40	4	21	9	56	28	12	104	43
17	2	5	21	52	0	0	50	43	33	47	29	43	4	21	8	50	39	16	108	45
18	1	3	28	70	3	3	51	44	29	41	33	49	1	5	11	69	34	14	123	51
19	2	5	23	57	0	0	23	20	15	41	26	39	2	10	10	62	19	8	82	34
20	0	0	29	72	2	2	22	19	10	21	25	37	5	31	12	75	17	7	88	37
21	1	3	23	57	0	0	27	23	23	33	28	42	1	5	8	50	25	10	86	36
22	0	0	22	54	0	0	19	16	3	4	14	21	0	0	1	6	3	1	56	23
23	1	3	9	22	0	0	9	8	2	3	2	3	0	0	1	6	3	1	21	9
24	2	5	10	25	0	0	3	3	6	9	2	3	0	0	6	37	8	3	21	9
25	0	0	4	10	0	0	6	5	0	0	3	4	0	0	0	0	0	0	13	5
26	8	21	38	95	6	5	91	78	52	74	65	97	1	5	15	94	67	28	209	87
27	20	53	37	92	27	24	97	84	49	70	59	88	6	31	14	87	102	43	223	93
28	6	16	37	92	5	4	91	78	54	77	66	98	1	5	16	100	66	28	210	88

Table VI. Numbers and Per Cents of Pupils Giving Correct Responses to Items in Test I
Preliminary and Final—Continued

ITEMS	U. H. S.			H. S. 4			H. S. 3			H. S. 2			TOTAL		
	38-Pre No.	%	40-Final No.	112-Pre No.	%	116-Final No.	70-Pre No.	%	67-Final No.	19-Pre No.	%	16-Final No.	239-Pre No.	%	239-Final No.
29	9	24	36	0	0	74	2	3	59	1	5	15	12	5	184
30	3	8	27	0	0	54	1	1	40	0	0	11	4	2	132
31	0	0	25	0	0	19	0	0	14	0	0	4	0	0	62
32	17	45	36	2	2	43	8	11	46	0	0	11	27	11	136
33	9	24	32	1	1	58	7	10	50	2	10	11	19	8	151
34	22	58	37	9	8	46	10	14	42	0	0	7	41	17	132
35	2	5	40	0	0	4	1	1	0	0	0	0	3	1	44
36	3	8	39	2	2	2	5	7	46	0	0	12	10	4	99
37	2	5	24	0	0	11	2	3	11	0	0	2	4	2	48
38	13	34	32	4	4	37	5	7	26	-0	0	4	22	9	99
39	7	18	26	1	1	30	4	6	17	1	5	7	13	5	80
40	7	18	25	1	1	29	5	7	17	2	10	6	15	6	77
41	8	21	18	1	1	65	16	23	35	0	0	10	25	10	128
42	2	5	27	1	1	54	3	4	29	0	0	9	6	2	119
43	1	3	23	0	0	42	1	1	19	0	0	8	2	1	92
44	11	29	18	2	2	66	3	4	32	0	0	2	16	7	118
49	0	0	1	0	0	3	0	0	4	0	0	1	0	0	9

ination must be seriously considered. Certain it is that either they are too difficult for the group, enough time has not been given, or enough direct planning for accomplishment has not been done. For example, in item 49, the specific gravities of H_2SO_4 and H_2O are given, and the question is asked, "What fraction of a quart mixture of S. G. 1.3 would be water?" But 4% of the total number of 239 pupils gave correct responses. Either the item is too difficult, enough time has not been given to it in the unit, or specific attention has not been directed to it. Space precludes more discussion of this phase here, but future procedures with regard to revision of the unit are indicated. Third, whether or not these items are desirable or essential for pupils enrolling in secondary school physics is a question which arises. To be sure, they were initially selected to accomplish certain objectives, but there may be doubts in the minds of readers of this article on this question. There still remains the necessity of determining to what extent these items are really essential in the functioning lives of people. No one will deny that each item represents something which is essential or important to some one. Whether it is essential or important to every pupil enrolling in the course is a question. Perhaps, whether or not one could live a happy and useful life without it, is the criterion to be used for judgment. Or whether or not one may live a richer and more complete life with it, is perhaps a better question. No objective attempt has been made to settle this question for any item. Personal judgment is perhaps the best criterion at present. Cooperating teachers have been asked to help answer this question. It may be taken up on a larger scale

after more people have become oriented to the nature of the plan in general.

Records for Test II similar to those given for Test I have been made and are available in the Bureau of Research, University of Minnesota. They are not reproduced here because they parallel very closely those for Test I. It may be worth noting that the scores on the appreciation paragraphs of Tests I and III correlated with the remainder of the tests with a coefficient of $.74 \pm .02$; the final scores in Test I correlated with final score on Test II with a coefficient of $.71 \pm .02$; the score on Test I exclusive of the appreciation paragraphs correlated with the same parts of Test II with a coefficient of $.55 \pm .04$. The fact of the lower coefficient in the last named correlation may be partly explained by the difference in the type of test; the parts of Test I included were uncompleted statements and short answer questions, while those of Test II were multiple choice questions.

Extra work included under additional activities for capable pupils was engaged in by a good many pupils. The following list is that for pupils in the University high school including Units I to III inclusive and part of Unit IV. A similar list for the other cooperating schools has not yet been made.

Biographical sketches	55
Topical themes	27
Book reports	8
Extra problems	6
Extra laboratory problems.....	25
Small diagrams	7
Large diagrams	25
Charts	1
Trips with reports	3
Periodical reports	10
Explanations	11

A question which arises, when the extra project work is considered, concerns the value of this work in view of the fact that achievement ratings on the tests fell so far short of perfection. Shall students be compelled to approach perfection in the essentials before being allowed to undertake the extra projects? A partial answer to this would be a tabulation showing the pupils undertaking this extra work. This has not yet been carried out, though a record for each pupil has been kept for the University high school class. For the most part,

to secure a cross section of teacher opinion through a questionnaire.

Another question in connection with achievement ratings in tests, is that concerning retention. Scores on the tests were far from perfection and there is a question as to how much effort and attention should be concentrated on securing higher ratings before proceeding with further units. Especially so is this important if retention is considered. If pupils do not retain the abilities developed even in a small degree, by the course, is it better to spend more time

Table VII. Mean Scores and Standard Deviations on Tests I and II, Preliminary, Final, and Repetition. University High School

	<i>Pre-test</i>		<i>Final</i>		<i>Repetition</i>	
	I	II	I	II	I	II
Mean	14.88	16.02	48.80	39.42	43.96	34.92
S. D.	6.48	10.2	9.00	9.72	9.88	7.48

the pupils in this group who undertook extra projects were the most capable pupils of the group, but there were a few among the less able who also engaged in these additional activities. There was a general understanding that activities for all pupils were to be completed before additional work was undertaken, but there was also an understanding that higher marks were to be given only to those doing extra work. Therefore some pupils tried to carry on extra projects while doing the regular work. This might be obviated by some compulsory rule, but it was not done with the units given here. There are always pupils who seem to prefer the extra project work to that in the regular outline, and there is a legitimate question as to whether or not these pupils should be held to the regular outline or allowed to follow their interests in choosing projects. Opinions of teachers would probably differ on this point, and it might be a worthwhile task

in securing higher achievement, or admit that more benefits will be gained by attacking further units. The question of superficiality versus intensiveness is raised. Just a little data from University high school students are available on retention in Test I and II. These tests were repeated as final tests at the end of the quarter without any review. Table VII presents a summary of scores on these tests for comparison.

Some loss is evident for both tests. The question still remains open relative to values of courses which have been taken, from which there remains very little measurable residue. We like to excuse ourselves for lack of knowledge of certain courses pursued in previous scholastic life, by saying we received great benefits though we remember nothing or very little about them. It seems necessary to assume here either that non-measurable values are not worth considering, or that some tangible means of

measuring them should be devised. Further procedures in the development of teaching units will be determined by tentative acceptance of either of these two alternatives. If the former, means of teaching better so as to produce immediate and retained abilities are to be investigated; if the latter, some of the present intangibles must be made tangible. Probably a compromise is desirable at present.

Another experimental procedure, already suggested, is the giving of preliminary and final tests to a control group of students not engaged in the study of physics. This is planned for immediate attack.

The report given is necessarily brief. For the immediate future, work is to be continued on the tentative development of enough teaching units to constitute a year of work in the third or fourth year of high school. Apparently this will include about twelve units of approximately three weeks each. Experimental try-outs with variations in method, should furnish more data. Units I to V in first form, with the exception that I has been once revised, are given below. Any teacher may make use of them in any way, but experimental try-outs are solicited, with reports of success or failure, and constructive criticism.

An examination of any unit will make it evident that each activity represents a project in itself, many times necessitating preparatory work not at once evident. For example 19 in Unit I requires preparatory reading on the proper use of a beam balance, with directions concerning its manipulation. Any one desiring to cooperate actively in further work on these units or ask questions

concerning them may address the chairman of this sub-committee.

UNIT I

What are hydrometers, for what are they used, and how do they illustrate an essential phase of science?

Leisure time, and exploratory-vocational and vocational aims, primarily.

COMMON ACTIVITIES FOR ALL PUPILS FOLLOWING A PRE-TEST COVERING A LARGE SAMPLE OF MINIMAL ESSENTIALS.

For the knowledge objective, primarily

1. Study the construction of metric tables of length, area, volume, and weight. (For area and volume, use sq. and cu. units of length, respectively).

2. Review the English tables of length, area, volume, and weight.

3. Memorize: 1 inch = 2.54 cm.; 1 m. = 39.37 inches; 1 kg. = 2.20 lbs.; 1 liter = 1.06 qts.

4. Explain the origin of the units: meter, kilogram, liter.

5. Show how the number of inches in the various multiples and subdivisions of the meter may be quickly and conveniently found from the number 39.37.

6. Density is defined as the weight per unit volume. Explain the meaning of this statement by concrete illustrations.

7. Specific gravity is defined as the ratio between the weight of a body and the weight of an equal volume of pure water at 40 C. Explain, by concrete illustrations, the meaning of this statement.

8. Explain concretely the distinction between density and specific gravity.

9. Explain why some density tables are the same as specific gravity tables.

10. Study the construction of a battery hydrometer and a radiator solution hydrometer.

11. Find out what solutions are used in batteries and automobile radiators.

12. Explain how the two hydrometers mentioned are used in practice.

13. Draw a diagram of a hydrometer showing the differences in scale calibration of the two types mentioned.

14. Explain the effects of different liquids in floating the hydrometer at different levels (e. g., the lighter the liquid, the lower the hydrometer sinks).

15. Show what relation exists between the weight of the hydrometer and the weight of the liquid it displaces. (Archimedes' Principle applied to floating bodies).

16. Explain the relations existing between (1) battery charge and hydrometer reading, and (2) radiator solution freezing point and specific gravity.

17. Make a list showing many common uses of hydrometers.

18. Make a list of vocations associated with the use of hydrometers.

19. Use a balance and weights to weigh a specific gravity bottle.

20. Explain the proper use of a balance and weights in weighing an object.

21. Find the specific gravity of some liquid by the use of a specific gravity bottle, a balance, and weights.

For the technique objective, primarily

22. Find the height in cm. of a man who is 5' 9" tall.

23. Explain as nearly as you can the procedures which your mind followed in solving the problem of (22).

24. List the steps in (23) which are common to the solution of any problem, no matter of what kind.

Solve the following problems, noting the steps listed in (24), which are followed in each case:

25. Find the weight in kgs. of a man weighing 180 lbs.

26. Find the capacity (in liters and gallons) of a tank which measures 4 m. long, 2 m. wide, and 160 cm. deep.

27. Find the weight in g., kg., and lbs., of water which would fill the tank described in (26).

28. How would you verify the statement that "a pint's a pound, the world around"?

29. Find the density in gm. per cm. 3 of a block of iron 10 by 5 by 4 cm. weighing 1.5 kg.

30. A block of stone weighing 812 lbs. measures 4 ft. by 12 in. by 15 in. What density has it in lbs. per ft. ³?

31. Find the number of kg. of mercury in a flask containing 140 cc.

32. Find the weight of 2 cu. ft. of aluminum whose density is 265 gm. per cm. 3.

33. Find the volume in cu. ft. of the cork in a life preserver weighing 22 lbs. whose specific gravity is .2.

34. Find the weight in lbs. of a cake of ice measuring 20" x 16" x 24", its specific gravity being .91.

35. How many cc. of concentrated sulphuric acid must be mixed with a liter of pure water in order to make a solution of specific gravity 1.28?

36. Find the number of cu. ft. of water displaced by a rowboat weighing 300 lbs.

37. A barge weighing 700 tons will displace how many cu. ft. of water after taking on 200 tons of coal?

38. Explain how the capacity of a bottle may be found by means of a balance and weights.

39. Show how a long test tube might be graduated to read cc. by using only a balance and weights.

40. Find the density of a piece of ice which floats 9-10 submerged in water.

41. Find the length of a brass cylinder which weighs 20 g., the diameter being 2 cm. and the density of brass 9.5 g. per cm.³.

EXPERIMENTALLY DETERMINE:

42. The density of cylinders of brass, aluminum, and copper, by using vernier calipers and a balance with weights.

(Make a tabulated record of your work to show all measurements and computations made).

43. The number of cm. in an inch and the number of cm.² in an inch² by measuring the dimensions of a rectangular piece of paper with an inch and a cm. rule, respectively.

(Make a tabulated record of your work to show all measurements and computations made).

EXPERIMENTALLY DETERMINE AS IN (42) AND (43):

44. The specific gravity of alcohol by using a specific gravity bottle, alcohol, and a balance with weights.

(Tabulate measurements and computations).

For the habit and skill objective primarily

45. Drill in multiplication and division of decimals in order to review rules of pointing off decimal places.

46. Drill on such mental problems as: How many mm. in a m.? How many mg. in a kg.? How many cm. in a mm.? How many inches in a meter? How many lbs. in a gm.? How many inches in a cm.? etc.

47. Make several hydrometer determinations of specific gravity until accuracy is obtained.

48. Take at least three practice tests, one each week, on all the work covered to date in the unit. These should be short answer questions covering much ground, and sample problems. One may be as follows:

a. If the density of a body is 3.4 gm./cm.³, what is its specific gravity?

b. What is the density of the same body in lbs./ft.³?

c. A density bottle of capacity 50 cc. weighs 25 g. empty and 80.35 g. filled with oil. Find the density of the oil.

d. Calculate the weight of a rectangular sheet of aluminum 1 ft. sq. and $\frac{1}{2}$ " thick, its specific gravity being 2.7.

e. A piece of gold weighs 772 g. Find the weight of a piece of lead of the same volume. The specific gravities of lead and gold are 11.3 and 19.3 respectively.

A long practice test may be given the day preceding the final test, preferably consisting of 30 short answer questions reviewing the items of information and problem content.

For the appreciation objective, primarily

49. Write a theme on the relative advantages of the English and Metric systems of measures.

50. Discuss or seek to answer the question, "What is measurement and why is it an essential element in modern life?"

51. Carefully consider the relation of measurement to the progress of science. Give concrete illustrations.

52. Cite five cases demanding more than ordinary accuracy of measurement.

53. Show how the accuracy of a measure may be judged.

54. Illustrate the meaning of accuracy of less than 1% error.

55. Find the per cent of error in a measure of .1697 meters, when the mean of 5 careful measurements is .1701 meters.

56. Make a list of (1) devices and (2) units of measure which are now used in measuring the following: Water pressure, time, force, distance, electric current, temperature, humidity, electric power, specific gravity of liquids, weight, heat, intensity of a light, electric pressure, intensity of illumination, electric energy, gravity.

Final test on a large sample of minimal essentials.

Suggested additional activities for capable or problem pupils:

1. Make measurements with a vernier caliper to obtain volumes.

2. Make measurements with a micrometer caliper to obtain volumes.

3. Make measurements with a diagonal scale and dividers to obtain volumes.

4. Prepare a paper on kinds of radiator non-freeze solutions.

5. Prepare a paper on the life of Archimedes.

6. Prepare a paper on the history of the hydrometer.

7. Prepare a paper on types of balances and their uses.

8. Prepare a paper on weight-making—variations in quality.

9. Prepare a paper on fine measuring devices.

10. Prepare a paper on gasoline testing.

11. Prepare a paper on milk testing.

12. Prepare a paper on types of hydrometers and their uses.

13. Prepare a paper on the history of the English system of weights and measures.

14. Prepare a paper on the history of the Metric system of weights and measures.

15. Prepare a paper on, "Tabulation, as an Aid in Science."

16. Prepare a paper on "A Visit to a Battery Station."

17. Make a hydrometer.

18. Diagram types of hydrometers.

19. Make a large metric-English equivalents chart.

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UNIT II

What are machines and of what value are they? Leisure time, and exploratory-vocational and vocational aims, primarily.

ACTIVITIES

For knowledge objective, primarily

1. Show what constitutes a simple lever and how its use is an application of the principle of moments. Use a simple see-saw as an illustration.

2. Show how either two forces or many forces acting in opposite directions may balance one another on a simple lever, the weight of the lever itself being balanced.

3. Show how the principle of moments is applied in the case of a simple lever with unequal arms, the weight of the lever being unbalanced in itself.

4. Use a simple suspended balanced stick and known weights, and verify the principle of moments with two, and more than two weights.

5. Find out what is meant by the term, "center of gravity" and illustrate its use in connection with levers.

6. Draw a diagram of a wheel and axle (windlass) and show how the principle of moments applies.

7. A principle (the principle of work) often quoted is that the amount of work put into a machine is equal to that obtained from it, neglecting friction. Discover (1) what is meant by this statement, (2) how work is commonly computed in terms of force and distance, and (3) how the principle quoted applies to the lever, (teeter-totter) and wheel and axle (windlass).

8. Discuss the essential conditions which are fulfilled in case work is accomplished. Consider vertical and horizontal distances and weights of bodies.

9. Show how the principle of work may be applied to (1) an inclined board, up which a cart is being pushed; (2) a single suspended pulley; (3) a single pulley arranged so that it moves with a weight which is fastened to it; (4) a combination of pulleys consisting of a fixed block and a movable block each containing three sheaves; (5) a jack screw.

10. Show the probable effect of friction on the action of each of the machines mentioned so far.

11. Explain (1) what the physicist means by the term, efficiency; (2) the effect of friction on efficiency; (3) the limit to the possible efficiency and the reasons therefor.

12. The principle of the conservation of energy has been called the "con-

ner stone of modern physics." Find out what the principle is and show its relation to items 7-11 inclusive.

13. The mechanical advantage is defined as the ratio between the resisting and acting forces, respectively. Show the difference between the theoretical and practical mechanical advantage in the case of a system of pulleys and discuss the reasons for the practical discrepancy.

14. What is the mechanical advantage for each of the machines spoken of so far? Consider both theoretical and practical.

15. By illustration, show how the mechanical advantage may be large while the efficiency may never exceed 1.

16. The physicist defines energy as "capacity for doing work." He says they may be classified as kinetic or potential. Show what he means by these terms and illustrate in each case.

17. Explain how the weight in a pile driver illustrates transformations of energy.

For appreciation objectives, primarily

18. Make lists of everyday examples of levers, wheel and axles, pulleys, inclined planes, and screws.

19. What relationships do compound machines bear to simple machines?

20. Discover how mechanical advantages of compound machines may be found from the mechanical advantages of the simple machines composing them.

21. Make a list of vocations associated with the study of simple machines.

22. Find out what is meant by a "perpetual motion machine" and the possibilities of its discovery.

23. Explain (from a consideration of machines) why nature may be said to be orderly and harmonious.

24. Explain the use of generalization in the study of machines, and in science in general.

25. Show how machines are force or speed multipliers but not labor savers in a scientific sense.

26. Show by illustration how progress is now taking place in the discovery of new combinations of machines.

For technique objective, primarily

27. Analyze the steps through which your mind proceeds in the process of solving a problem.

28. Solve the following problems or ones involving the same operations and show how the steps listed for (27) are followed:

Black and Davis p. 22-5; p. 26-7; p. 34-5 1, 6, 7; p. 36-14; p. 45-1; p. 46-6; p. 56-11. Headley p. 115-5 and 6.

29. In the laboratory, under the instructor's direction, experimentally determine the efficiencies of a set of pulleys and an inclined plane.

30. Make tabulations showing the processes followed in the laboratory experiments in (4) and (29).

31. Explain the advantages of tabulation and show how it illustrates a type of thinking useful in daily life activities.

32. Show by explanation, involving illustration, what is meant by the scientific method of problem solution. Give illustrations showing methods which are not scientific.

33. By illustration from this unit, show what is meant by the process of generalization. Show its advantage in everyday life activities.

Additional activities for capable pupils

1. Find the weight of a tapering rod by balancing the rod on a knife edge, using a weight to balance the rod at

other points than its natural balancing point.

2. Write a theme on the lever in everyday life.

3. Review worthwhile periodical articles on phases of this unit.

4. Study the crane and analyze its parts as simple machines.

5. Study the derrick as in (4).

6. Study the sewing machine as a combination of simple machines.

7. Study the automobile as a combination of simple machines.

8. Write a theme on the subject, "The world of machines a hundred years hence."

9. Investigate perpetual motion machines as devised by various men.

10. Analyze wind-mills as machine combinations.

11. Analyze water-wheels as machine combinations.

12. Problems in Black and Davis, p. 46-10, 11. Fuller, Brownlee, Baker p. 669-20, 22; p. 629-33.

13. Report on references in the following list:

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- Swain—*The Young Man and Civil Engineerings* Macmillan, 1925

UNIT III

Principles of liquid and gas pressure and their applications in water and gas supply systems.

Ultimate objectives:—social-civic, exploratory-vocational, leisure time, health.

ACTIVITIES FOR ALL PUPILS

For knowledge objective, primarily

1. Outline the general plan of a large city water system, showing source, quality of supply, purification, means of maintaining pressure, etc.

2. Explain what factors determine water pressure in a water pipe and show how it may be computed in pounds per inch², or gms. per cm.².

3. Show what relation exists between weight of the water in a vertical pipe and the pressure it exerts at the bottom.

4. Show what distinction is commonly made between liquid pressure and forces.

5. Show how force may be computed from pressure.

6. Explain what factors determine liquid force.

7. Explain the relations between weight and force on base in different shaped dishes filled with water to a given height, when the areas of the bases are equal.

8. Explain why liquids transmit pressure in all directions while solids do not.

9. Show how pressures and forces of liquids other than water compare with those of water.

10. Explain the action of a hydrostatic press and show what principle is applied in its use.

11. List as many devices as you can which utilize the same principle as the hydrostatic press.

12. Explain how a water pressure gauge is constructed and used to measure water pressure.

13. Explain how a closed manometer may be used to measure water pressure.

14. Explain how an open manometer might be used to measure water pressure.

15. Show how air may exert pressure as do liquids.

16. Explain how closed and open manometers might be used to measure gas pressures.

17. Explain mercurial and aneroid barometers as used to measure air pressures.

18. Explain the action of a water lift pump.

19. Explain the action of a water force pump.

20. Explain the action of a simple siphon using concrete numbers of pounds for illustration.

21. Explain the Magdeburg hemispheres.

22. List vocations connected with, or suggested by the principles of liquid and air pressure.

For appreciation objective, primarily

23. Read biographical sketches of Pascal, Boyle, Torricelli, and VonGuricke.

24. Show by illustration how the discovery of any of the principles discussed in this unit has led to many practical applications.

25. Show what relationship exists between invention and scientific discovery of principles.

26. Explain how a city water system represents an advanced stage of social development. Include a consideration of health, municipal control, and law observance.

27. Show how precautions have been observed in making water pipes tight, and the economic factor of small leaks in the system.

28. Show how the barometer is used in weather forecasting.

29. Explain the organization of the U. S. Weather Bureau, its social significance, and its dependence on the progress of science.

30. Show what recent invention is dependent on the application of the principles of air pressure.

31. Show what new application is now being sought for.

32. Visit a city filtration plant, or read a description of one.

For technique objective, primarily.

33. Explain some common relationships between solving problems in Physics and solving problems in everyday life. Illustrate.

34. Solve the following problems or ones similar to them, assigned by the teacher:—

Fuller, Brownlee, Baker: p. 48-7, 8, 9, 10, 12, 13, 14, 15, 16, 24. p. 57-3, 5. p. 117-2, 3, 13, 24. p. 123-1, 3. p. 127-1. p. 133-2. p. 134-4.

35. Experimentally determine in the laboratory (individual or group):

a. How to measure air pressure with a barometer.

b. How to measure gas pressure with open manometers containing water, and alcohol.

c. How to measure city water pressure with a gauge.

d. How to verify Boyle's law by any method.

e. How to measure lung pressure with an open mercury manometer.

36. Make concise, neat tabulations showing measurements, computations, and methods of all experimental work.

37. Diagram any three devices explained in this unit and show the value of the diagram in making the explanation more clear.

Additional activities for capable pupils

1. Prepare a closed manometer and use it in measuring the city water pressure, comparing it with the gauge reading.

2. Prepare to give a topic on some large water power plant showing the general plan, purpose, and operation.

3. Draw a diagram of, and explain the hydraulic elevator.

4. Draw a diagram of, and explain hydraulic brakes on automobiles.

5. Prepare to give a topic on the use of pneumatic machinery in industry.

6. Prepare a topic on waterwheels and use of waterpower in the U. S.

7. Visit a gas factory or read descriptions for the purpose of discovering how gas pressure is maintained.

8. Explain an intermittent siphon and a self-starting siphon, using diagrams to aid.

9. Explain how flowing water may be used to drain swamps.

10. Diagram and explain the diving ball.

11. Diagram and explain a simple Westinghouse air brake.

12. Explain a pneumatic cash carrier system.

13. Explain a water meter.

14. Read some of the references which follow and prepare reports on them. References in addition to textbooks previously given.

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UNIT IV

Applications of the Principles of Fluid Pressure in Water and Aircraft.

Ultimate Objectives: Exploratory-vocational, social-civic, and leisure time.

COMMON ACTIVITIES FOR ALL PUPILS

For the knowledge objective, primarily

1. A cube of iron under water weighs less than in air. *Explain why this is true*, by applying the laws of liquid pressure learned in Unit 3.

2. *Explain*, by applying the laws of liquid pressure, *why* a block of wood floats in water.

3. *Explain how and why* the water line of a boat changes from fresh to salt water.

4. *Explain why* a balloon floats in air.

5. *Show how much weight* a cube of iron loses in water.

6. *Explain what determines* how far a floating body will sink in a liquid.

7. *Explain what determines* how high a balloon will rise.

8. *Explain how a submarine may be made to sink or rise to the surface when not in motion.*

9. *Show in general, what forces support* airplanes.

10. *Show concretely how two forces may be considered as one.*

11. *Graphically represent two forces acting at an angle of 90° and the one force which will produce the same result (resultant).*

12. *Graphically represent (1) the force which supports an airplane; (2) the force moving a sail-boat; (3) the force acting to pull a canal boat along a canal; showing the actually effective force (component) in each case.*

13. *State the principle which shows the amount of the buoyant effect of liquids and gases on water and aircraft, respectively.*

14. *Show what contrasts there are between surface boats and balloons, and submarines and airplanes, in the application of this principle.*

15. *Make a list of vocations in which some knowledge of the principles of water and aircraft is essential.*

For the appreciation objective, primarily

16. *Make a list of inventions which involve the principle of Archimedes.*

17. *Show how the principle of Archi-*

medes might be used in finding the specific gravity of a heavy body, a cork, and a sample of gasoline.

18. *Read some current periodical articles on (1) airplanes, (2) balloons, (3) submarines, and (4) surface boats, and make a list of the main points given in each.*

19. *Show by a concrete illustration, how each person generally credited with the invention of the airplane or submarine, was indebted to other workers in the same field.*

20. *Contrast the world of 1900 with the world of 1928 by making two lists of devices used at each date.*

21. *Make a list of occupations, not in existence in 1900, now followed by considerable numbers of persons.*

For the technique objective, primarily

22. *Experimentally determine the specific gravities of (1) some floating object, as cork; (2) some irregular solids that sink in water; (3) some liquid; employing the technique suggested by the principle of Archimedes.*

23. *Explain how Archimedes might have performed his famous experiment.*

24. *Explain how the size of pontoons for a stated purpose might be determined.*

25. *Find out how much water a flat-boat 220 ft. long and 40 ft. wide, weighing with its cargo 35.2 tons, will draw, i. e., how deep it will sink.*

26. *Calculate the force necessary to open the hatch door of a submarine, if the door is 2 ft. sq. and at a depth of 100 ft in water.*

27. *Calculate the pressure in lbs. per sq. inch on the bottom of a boat drawing 12 ft. of water.*

28. *Show how ships might be constructed to make them non-sinkable.*

29. Find the normal lifting power of the Graf Zeppelin, which has a capacity of 3,708,043 cu. ft., if inflated with hydrogen gas.

30. Verify, experimentally, the principle of the parallelogram of forces.

31. Find the tension in each of two wires supporting a weight of 400 lbs., each wire making an angle of 60° with the vertical.

32. Make a list of the kinds of items which should be included in a good tabulation of an experiment in physics.

33. Make a model tabulation for the experiment of item 30.

For skills, primarily—Problem solving

34. Find the volume in cu. ft. of a floating mine weighing 430 lbs., if it just floats in sea water whose specific gravity is 1.03.

35. A board is 12 ft. long, 8 in wide and 6 in. thick and floats with 4 of its volume in air. Find its weight.

36. A cu. ft. of metal weighs 87.4 lbs. under water. Find its weight in air.

37. An automobile weighing 2400 lbs. is loaded on a barge 30x9 ft. How much further will the barge sink?

38. Find the loss of weight of a stone having a volume of 7.3 cm^3 when submerged in water and alcohol, respectively.

39. Find the weight of a 10 cm^3 steel ball in mercury.

40. Find the weight of a 10 cm^3 platinum ball in mercury.

41. The cork in a life preserver has a volume of 3 cu. ft. and a specific gravity of .2. Find the weight necessary to just sink it.

Additional activities for capable pupils

1. A cu. ft. of stone weighing 160 lbs. is thrown into water. If you can

lift 100 lbs., can you lift the stone when it is under water? (Find the weight of the stone under water).

2. Give arguments to substantiate the statement that boats which sink will go down to the bottom.

3. The exposed volume of an iceberg is 400,000 cu. ft. Find its total volume.

4. Explain how caissons containing air can be used to float submarines that are on the bottom of the sea.

5. Describe a diver's suit and explain how it is used in deep sea diving.

6. Compare Jules Verne's submarine with the modern submarine.

7. Prepare a paper on the history of balloons.

8. Prepare a paper on the history of airplanes.

9. Prepare a paper on the history of submarines.

10. Prepare a paper on the modern dirigible.

11. Prepare a paper on the subject, "The Aerial World of Fifty Years Hence."

12. Prepare a paper on the history of boats.

13. Make a large chart diagram showing the forces supporting an airplane.

14. Write an article on the principles of stability.

15. Write an article on pontoon bridges.

16. Construct a model airplane.

17. Construct a model sail-boat.

18. Review current periodical articles.

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UNIT V

Heating, Ventilating, and Humidifying Systems.

Ultimate Objectives: Health, Vocational-avocational, Social.

COMMON ACTIVITIES FOR ALL PUPILS

For the knowledge objective, primarily

1. Make a list of all sources of heat of which you can think.

2. Explain how heat is transmitted from a heating device to other parts of a room or building. Consider a stove in a room, a hot-air heater in the basement, a hot water heating plant in the basement, and a steam or vapor heating system.

3. Explain the general plan of some ventilating system with which you are acquainted.

4. Explain the relation of ventilation to health.

5. Explain the general plan of some humidifying system.

6. Explain the relation of humidification to health.

7. Explain temperature; how it is measured and what it is.

8. Explain heat; what it is and how it is measured.

9. Explain humidity; what it is and how it is measured.

10. Explain an ideal plan for a home to care for heating, ventilating, and humidifying.

11. Explain how and why heat added to bodies, generally changes the volume.

12. Show how the change in length of a metal rod due to heat, can be measured.

13. Explain the meaning of the term, linear coefficient of expansion.

14. Explain how water changes in volume when its temperature is changed from 0° C. to 100° C.

15. Explain how air changes in volume when its temperature is changed from 0° C. to 100° C.

16. Explain the meaning of Charles' Law.

17. Explain the meaning of the term, absolute temperature.

18. Explain the use of insulating material in buildings.

19. Explain the principle of a fireless cooker.

20. Explain the principle of a pressure cooker.

21. Explain what boiling is, and how pressure affects it.

22. Describe Joule's experiment for determining the relation between Mechanical energy and heat.

Tell of other experiments along the same line.

23. Explain the modern conception of the nature of heat.

For the technique objective, primarily

24. Change to Centigrade: 68° F.,— 40° F., 212° F., 32° F., 100° F.

25. Change to Fahrenheit; 20° C.,— 40° C., 100° C.,— 190° C., 4500° C., 273° C., 212° C., 4° C., 32° C.

26. How many calories of heat will it require to heat 380 g. of water from 15° C. to 85° C.?

27. Find the number of calories required to heat 8 lbs. of water from 50° F. to 90° F.

28. Find the number of B. T. U. required to heat 8 lbs. of water from 20° C. to 60° C.

29. Find the change in pressure of the air in an automobile tire if the temperature to which it is subject changes from 20° to 30° C., assuming the volume constant.

30. Find the change in pressure in a water tank using compressed air to furnish pressure, when water pumped into the tank compresses the enclosed air to $1/5$ its former volume, assuming a constant temperature.

31. Find the increase in length of a steel rail 30 ft. long, when its temperature changes from 40° to 180° F.

32. Find the length of a brass bar 36" long at 32° F., when the temperature becomes 90° F.

33. Experimentally determine the linear coefficient of expansion of iron and copper.

34. Find which contains more moisture, air at 20° C. having a humidity of 80%, or air at 30° C. with a humidity of 60%.

35. Find the rise in temperature F. of 5 pounds of water in a pan, if all the energy from a 10 lb. weight falling through a distance of 20 ft. is given to the water alone.

36. A 30×5 tire is to be inflated to 35 lbs. per sq. in. pressure. How many times its original volume must be forced in the tube to give it the required pressure?

37. The driving wheel of the average locomotive is 72 in. in diam. How much further will it pull a train every 1000 revolutions of the wheel in summer when the temperature is 25° C than in winter at 0° C?

38. A steel tank filled with oxygen gas had a pressure of 225 lbs. per sq. in. at 10° C and was delivered to a room whose temperature was 30° C. What is the pressure now?

39. Experimentally determine whether or not a centigrade thermometer reads correctly at the freezing and boiling points of water, and design a graph, from which correct temperatures between these two points may be determined, by the use of the thermometer being tested.

40. Experimentally determine the effect of pressure on the boiling point in terms of degrees to 1 mm. of pressure.

**For the appreciation objective,
primarily**

41. Prepare to discuss the progress of heating, ventilating, and humidifying in recent years by illustration.

42. Make a long list of devices which are practical applications of the principles studied in this unit and be ready to show what principle is illustrated by each.

43. Make a detailed list of all the advantages, of which you can think, of moist air and hot water heating systems.

44. Consult heating manuals, engineering handbooks, etc. and list the vocational opportunities in the field of heating and ventilation.

Additional activities for capable pupils

1. Describe from personal inspection or reading, a modern air washer and humidifier.

2. Make an outline, or write a theme, on types of moist air heating plants.

3. Debate on the subject, "Resolved, that a moist air heating plant is preferable to a hot water heating plant for a six-room, two-story house."

4. Debate on the subject, "Resolved, that oil is preferable to coal as a fuel for heating houses."

5. Prepare a topic on the history of thermometers.

6. Possibilities of salesmanship in the field of heating, ventilating, and humidifying.

7. Prepare a topic on thermostats, their construction and use.

8. Make diagrams of any type of heating plant, labelling the parts.

9. Prepare a topic on insulation—types, varieties, values, and uses.

10. Review periodical articles bearing upon topics in the field of heating, ventilating, and humidifying.

11. Prepare a topic on fuels, giving types, heat values, economy, advantages and disadvantages in their use.

12. Prepare a topic on matches.

13. Prepare a topic on high temperatures.

14. Prepare a topic on fireless cookers.

15. Prepare a topic on pressure cookers.

16. Prepare a topic on the biographies of famous scientists in this field.

17. Explain the Tropic-Aire hot water heater for cars.

18. Explain the Percoplate Boiler for steam heating plants.

19. Gather experimental data from reports of health commission surveys in (1) the relation of ventilation to health, (2) the relation of humidification to health.

20. Report on the various heat losses in a gas engine compared to the steam engine.

21. A balloon contains 3,000,000 cu. ft. of helium gas and the temperature is 10°C . What volume of gas will escape when it flies in air whose temperature is 25°C ?

22. The kinetic energy of motion of an auto going 25 miles per hour, is 40,000 ft. lbs. How much heat energy in B. T. U. is developed by the brakes in stopping it.

23. Explain the construction and principle of thermos bottles and investigate the efficiencies of different kinds.

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From - Emory P. Johnson

Strange Things Are Happening

The American School in the Years to Come

Frederick P. Keppel



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STRANGE THINGS ARE HAPPENING

The American School in the Years to Come

FREDERICK P. KEPPEL

WE know, most of us, that strange things are happening at schools all over the world, at Oundle and Decroly, for example, or at Dalton and Winnetka and Omaha, or in New York City at the Lincoln and Walden schools. We can, if we like, dismiss any one of these schemes from our minds on the ground either that it emphasizes some element of the educational program out of all proportion to the rest, or that it costs too much for general adoption. On both counts, it wouldn't be hard to make out a good case, but we must reckon with the progressive movement as a whole, as well as in its individual parts; and I can not see how any dispassionate observer can fail to realize that, taken as a whole, these experiments point to a profound modification of what we may call the norm of education.

It would be a rash man who would speak with dogmatic confidence as to what these changes will be during say the next forty years. The safest stand is doubtless the one which I remember my grandmother used to take when she was asked as to the reality of a fire and brimstone hell. Her reply was always, "Wait and see." But one can not make a magazine article out of that.

If one tries at all, the best one can

do is to review certain general tendencies which seem significant, and then to hazard a guess as to the ways in which they will affect school life.

The past forty years have been marked by many a violent discussion of educational questions. At first these discussions consisted wholly of assertions on one side or the other. Of course each assertion was based on the experience of an individual; but, after all, one man's experience presents a very thin slice at the best, and one man's judgment is necessarily colored by all sorts of personal complications. The day is well within the memory of most of my readers when the reign of assertion was first seriously threatened. It was a significant moment when Gonzalez Lodge brought to an end the futile discussions concerning Latin vocabularies by the process of counting the two thousand words that are actually most frequently used in the texts which students read. Two other pioneers, young men who had been reading Francis Galton, had much to do with the new order of things. They were Leonard Ayres, who was working at that time for the Russell Sage Foundation, and Edward L. Thorndike, then and now of Teachers College. Some of the first fruits of this new way of getting at

things, which followed the publication in 1915 of Ayres' "Measurement of Spelling Ability" and Thorndike's studies in arithmetic, which followed shortly thereafter, were bizarre enough, and it was often easy for a scholar to laugh them out of court so far as his own specialty was concerned. But the technique has constantly improved, and is still improving, and we can count on educational fact-finding as steadily displacing assertion in the years to come.

Closely associated with the more scientific testing of performance is the measuring and recording of differences in individual capacity. The so-called psychological testing of the American army in 1918 and the nation-wide publicity which followed served to stimulate interest in this field; but in many ways the results were unfortunate. It would have been better if there had been further refinement and experimental application before the idea was brought so prominently to public attention. Those with half knowledge rushed to the front and made all sorts of extravagant claims, and as these were disproved by experience, the testing program received a setback. There is no question, however, that this kind of mental measurement also will have a profound influence on the life of the school. It is the accepted order in all the so-called progressive schools, and is rapidly being adopted in both public and private institutions. It has already had two important results. For one thing, the problem child, so called, is less likely to waste the time of his classmates and wear out the nerves of his teacher. For an-

other, the time of the pupil of outstanding natural ability is more likely to be used to advantage. Incidentally, as we learn to test and record the pupil's native capacity and his performance, and to act on the information, isn't it likely that the same process will be followed in the case of the teacher?

The school is already being influenced by a change in the attitude of the college. In the case of the more enlightened institutions, at any rate, college is no longer exerting a deadening pressure for uniformity upon school; but, as its own center of interest is shifting from the curriculum to the individual, an increasing desire is being manifested to work coöperatively with the schools in the development of worth-while individuals.

Of special significance is the study, just begun and to continue for seven years, in which the schools and colleges of Pennsylvania are working with the Carnegie Foundation to point out, strengthen, and make consistent the vertical relationships for the individual, and to minimize the horizontal institutional emphasis that tends to segment education. The underlying idea is that a college mind can generally be recognized as such at an early age, and that its possessor should receive appropriate treatment, even at ten years.

Personnel work was developed in industry to reduce the costs of an extravagant turnover. Its technique is being carried over into school affairs, and little by little, the school is learning to make measurable and comparable records, which will be far more useful than the glowing but vague memories of head masters.

For fifty years—but not so very much longer—we have accepted class instruction as the only conceivable type of instruction. The idea of the private tutor has been so closely connoted with a combination of wealth and stupidity on the part of the pupil that, except at Oxford and Cambridge, no one gave even a thought to its existence. Nevertheless, as Dean W. F. Russell has recently pointed out, if you take the world as a whole to-day, the pupils receiving individual instruction as compared with those in the classroom are much in the majority.

Dean Russell is right, I think, in feeling that the library will before long replace the class-room as the center of school and college life. It will be a new kind of library, of course, and the teachers' study will be a part of it.

To say that the school curriculum is receiving relatively less attention is not to say that it is receiving none. It is having so much that we may expect to see it get worse before it gets better. About the most significant tendency, to my mind, is the growing realization of art as a normal factor in human life. The reorganization of the materials of instruction, important as it is, seems to me of relatively less significance, and the unfortunate place which the school now occupies in the struggle for the control of public opinion in the United States is, I am optimist enough to believe, a temporary one.

A readjustment of responsibilities and opportunities as between the school and the home is already pretty well advanced, but even greater changes are doubtless coming. To summarize the factors already in evi-

dence: A small family, often a single child, versus a large one; the apartment versus the private house, with the elimination of the back yard and, by the same token, the rapid elimination of chores from the farm, though just how profound the educative significance of those chores has been I was never very sure. Most fundamental of all is the recognition that woman is developing an entirely new kind of life for which the old order, both in school and at home, offers a singularly poor preparation.

We are coming to realize that school takes a very small part of a student's time, but that his education occupies all of his waking hours—and perhaps his sleeping hours as well! One result of this realization is the flowering of such intermediate activities as the nursery school, the afternoon play-class, the boy scouts, the summer camp and the dude ranch, or the European trip, all of them, as the Supreme Court would say, affected with an educational interest. Is it fantastic to look forward to the time when the teacher will be offered and will accept general responsibility for the individual pupil much as that which a doctor accepts for a patient? And this is a responsibility which certainly is not limited to the time of the patient's visits to the doctor.

I am not trying to be Chester-tonian when I say that to learn about the teaching of children to-day, one must examine the adult education movement. It is only very recently that educators knew we had such a movement at all. Now they are studying the capacity of adults to learn, and they find by actual experi-

mentation that instead of dropping off rapidly after the early twenties as had been generally supposed, the normal adult can, if he wants to, go on learning well through middle life, with only slightly reduced capacity, perhaps one per cent a year.

Think what it will mean to school and college when men come gradually to understand this and to act accordingly. The teacher can turn from the consideration of quantity to the consideration of quality. To quote Dorothy Canfield Fisher, whose, "Why Stop Learning?" deals with all these matters in a most stimulating fashion: "As adults more and more expect to go on learning, children may be less and less treated like small valises into which provisions for a long journey must be stuffed, no matter how the sides may bulge. To change the figure, at the start of life's journey, one needn't fill the tonneau with gasoline to the discomfort and perhaps danger of the passenger, since filling stations occur along the road."

Let me say in passing that if, as seems very likely, the center of educational interest for the next generation will be the education of the adult, this wouldn't in itself be a bad thing for school and college, which have had too many amateur critics during the generation just closing.

To summarize the modifying factors as I see them: In the face of problems men are coming to look for the facts instead of listening for the voice of authority. Not only do they recognize that individual differences exist—like the Shah of Persia when, after being invited to the Derby, he announced "It has long been known to me that one horse can run faster

than another"—but they are also recognizing that these differences can be measured and recorded, and the records used in the interest of the individual. Attention is shifting from the curriculum, and more slowly from the class, to the individual student; and the college is abandoning its attitude of patronage and control and is beginning to work with the school in his interest. Man was a feeling animal before he became a reasoning one and the school is coming to see that more time must be found for art, music and kindred studies.

In our rapidly shifting social fabric, the school must realize that its particular share of the common responsibility for future progress must change almost from day to day. It must realize also that the few hours that the child spends under its direct control must be adjusted and constantly readjusted to the other factors in his development.

The power to learn is a power which persists through active life and conscious self-education may be, and more and more will be, a life-long process. Schools and colleges will do their particular share of the job better if they will leave something—a good deal in fact—to the future.



Now let me make my guess as to what all this will come to. I make it in the light of these general trends, tempered doubtless by a comparison of my own school-days with those of my children. First, school will be regarded not as a preparation for life, but in John Dewey's words, as an essential part of life itself. What we will call sound education will be the optimum development of an individ-

ual child, an optimum not to be measured by any predetermined formula. His load will be adjusted not to any curriculum, but to his own capacities. Those who think that in the aggregate this load will not only be different but will be lighter than at present, will be fooled if the school does its job well, and that means very largely not overdoing it.

Nothing will be regarded as quite so important as health, bodily and mental, and the happiness which comes from the combination. Discipline will not be forgotten, but it will be to a far greater degree self-discipline than is now believed possible. In his social relations, which will be regarded as of primary importance, the object will be to fit the environment to the child, not the other way round as is so often the case to-day. It should be a point of conscience with the schoolmaster to pass along a pupil for whom he cannot provide the most favorable environment.

Probably the best nucleus around which to develop the qualities we desire will remain the orderly learning of things worth while in themselves and useful as a foundation for further learning, but the teacher of the future will recognize that such learning, good as it may be, is only a by-product. The real objective is a growing human being who is honest with himself and with others, who is as free as it is possible for him to be in this imperfect world from conscious and unconscious inhibitions and taboos and all the rest; whose natural curiosity—and every normal child has it—has not been killed, but encouraged to develop so freely that it will go on working

throughout his life. It is far more important that he should have learned the satisfaction of knowing something thoroughly or doing something well, than what that particular thing may be; more important that he should have acquired the habit of reading than that he should have read any particular texts; that he should see what his eyes show him and not what he is told to look for; that he should form his own mind and ideals rather than that they should be formed for him more or less effectively by chapel addresses, for example, or by the pressure of stimulated school spirit.

In all this, what part is to be played by the seasoned teacher of to-day—and by seasoned teacher I mean the man or woman who has been brought up under the old order? First, he must make himself aware of all these changing tendencies. Whether he likes them is beside the point. His function, and it seems to me a fundamentally important one, is to see that in the changes which are already taking place, and which will come in greater measure, what is sound and tried and proved in the old is not lost in the shuffle. If, on the other hand, the seasoned teacher shuts his eyes and grits his teeth and fights to hold everything which he has been brought up with, he has a good chance of losing it all. If he takes the trouble to understand what the innovator is trying to do, and will give him credit for a sincerity equal to his own, then and only then can he do his bit toward saving the best of the old, toward toning down the extravagances of the new, and finally toward the highly difficult job of fitting the two together.

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